

506
AMA
1876

CONSTITUTION,
LIST OF MEETINGS,
COMMITTEES AND MEMBERS,
OF
THE AMERICAN ASSOCIATION
FOR THE

ADVANCEMENT OF SCIENCE,

FOR THE TWENTY-FIFTH MEETING,

TO BE HELD AT THE
THE LIBRARY OF THE

BUFFALO, N. Y.,
AUG 1 1924

UNIVERSITY OF ILLINOIS
AUGUST, 1876.

THE LIBRARY OF THE
AUG 4 1924
UNIVERSITY OF ILLINOIS

SALEM:
PUBLISHED BY THE PERMANENT SECRETARY.
1876.

EDITED BY
F. W. PUTNAM,
Permanent Secretary.

PRINTED AT
THE SALEM PRESS,
SALEM, MASS.

306
AMA
1876-1903

(incomplete)

OFFICERS OF THE ASSOCIATION ELECTED FOR THE BUFFALO MEETING.

PRESIDENT.

WILLIAM B. ROGERS, of Boston.

VICE PRESIDENT, Section A.

CHARLES A. YOUNG, of Hanover.

VICE PRESIDENT, Section B.

EDWARD S. MORSE, of Salem.

PERMANENT SECRETARY.

FREDERICK W. PUTNAM, of Salem.

GENERAL SECRETARY.

THOMAS C. MENDENHALL, of Columbus.

CHAIRMAN OF PERMANENT SUBSECTION OF CHEMISTRY.

GEORGE F. BARKER, of Philadelphia.

CHAIRMAN OF PERMANENT SUBSECTION OF ANTHROPOLOGY.

LEWIS H. MORGAN, of Rochester.

SECRETARY of Section A.

ARTHUR W. WRIGHT, of New Haven.

SECRETARY of Section B.

ALBERT H. TUTTLE, of Columbus.

TREASURER.

WILLIAM S. VAUX, of Philadelphia.

STANDING COMMITTEE.

Past Presidents.—JOSEPH HENRY, of Washington; BENJAMIN PEIRCE, of Cambridge; JAMES D. DANA, of New Haven; JAMES HALL, of Albany; ALEXIS CASWELL, of Providence; STEPHEN ALEXANDER, of Princeton; ISAAC LEA, of Philadelphia; F. A. P. BARNARD, of New York; J. S. NEWBERRY, of New York; B. A. GOULD, of Boston; T. STERRY HUNT, of Boston; ASA GRAY, of Cambridge; J. LAWRENCE SMITH, of Louisville; JOSEPH LOVERING, of Cambridge; JOHN L. LECONTE, of Philadelphia.

Officers of the Preceding Meeting.—J. E. HILGARD, of Washington; H. A. NEWTON, of New Haven; J. W. DAWSON, of Montreal; S. H. SCUDDER, of Cambridge; S. P. LANGLEY, of Allegheny.

The President, Vice Presidents, Secretaries and Treasurer of the Meeting.

From the Association at large.—Six Fellows to be elected on the first day of the meeting.

LOCAL COMMITTEE
FOR
THE BUFFALO MEETING.

Chairman:—HON. GEORGE W. CLINTON, LL. D.

Secretary:—JOHN GEORGE MILBURN.

Treasurer:—GEORGE P. PUTNAM.

SUBCOMMITTEES.

On Reception and Accommodation.

HON. SHERMAN S. ROGERS, *Chairman*.

On Finance.

GEORGE P. PUTNAM, *Chairman*.

JOSIAH LETCHWORTH.

On Excursions.

Capt. E. P. DORR, *Chairman*.

On Railroads.

CYRUS CLARKE, *Chairman*.

W. H. GLENNY, JR.

H. L. LYMAN.

Members of the Committee at large.

HON. PHILIP BECKER, Mayor of the City of Buffalo,

HON. A. S. BEMIS, President of the Common Council of the City of Buffalo.

E. C. Sprague, John B. Greene, E. S. Hawley, O. H. Marshall, Hon. E. G. Spaulding, Prof. George Hadley, M.D., Joseph Warren, James N. Mathews, David Gray, James O. Putnam, Rev. A. T. Chester, D.D., Dennis Bowen, Wm. H. Greene, Hon. James M. Smith, Hon. James Sheldon, Wm. C. Bryant, F. Sidway, Dr. George Hayes, Henry Chandler, Henry S. Sprague, J. N. Larned, Augustus R. Grote, Leon F. Harvey, M.D., Frank Hollister, David F. Day, William Thurston, H. M. Kent, Dexter P. Rumsey, Bronson C. Rumsey, S. S. Guthrie, George Howard, S. K. Worthington, A. Altman, Walter T. Wilson, Cyrus P. Lee, William H. Pitt, H. M. Clay.

SPECIAL COMMITTEES.

A. COMMITTEES CONTINUED FROM FORMER MEETINGS.

1. *Committee to Report in Relation to Uniform Standards in Weights, Measures and Coinage.*

F. A. P. BARNARD, of New York, WALCOTT GIBBS, B. A. GOULD, of Cambridge, JOSEPH HENRY, of Washington, J. E. HILGARD, of Washington, E. B. ELLIOTT, of Washington.	JOHN LECONTE, H. A. NEWTON, of New Haven, BENJAMIN PEIRCE, of Cambridge, W. B. ROGERS, of Boston, J. LAWRENCE SMITH, Louisville.
--	--

2. *Committee to Memorialize the Legislature of New York for a New Survey of Niagara Falls.*

F. A. P. BARNARD, of New York, CHARLES P. DALY, G. W. HOLLEY, of Niagara Falls.	JAMES HALL, of Albany, WILLIAM E. LOGAN, of Montreal,
---	--

3. *Committee to Report on the Principles of Nomenclature.*

J. L. LECONTE, of Philadelphia, JAMES HALL, of Albany, THEODORE GILL, of Washington.	J. S. NEWBERRY, of Cleveland, ALEXANDER AGASSIZ, Cambridge, THEODORE GILL, of Washington.
--	---

4. *Committee to Memorialize Congress and State Legislatures regarding the Cultivation of Timber, and the Preservation of Forests.*

F. B. HOUGH, of Lowville, ASA GRAY, of Cambridge, G. B. EMERSON, of Boston, J. D. WHITNEY, of Cambridge, E. W. HILGARD, of Berkeley.	J. S. NEWBERRY, of Cleveland, L. H. MORGAN, of Rochester, CHAS. WHITTLESEY, of Cleveland, W. H. BREWER, of New Haven,
--	--

B. NEW COMMITTEES.

1. *Committee to act with the Standing Committee in Nomination of Officers for the Meeting of 1876.*

SECTION A.

G. W. HOUGH, of Albany,
 H. T. EDDY, of Cincinnati,
 H. C. BOLTON, of New York,
 J. N. STOCKWELL, of Cleaveland.

SECTION B.

A. R. GROTE, of Buffalo,
 A. H. TUTTLE, of Columbus,
 E. D. COPE, of Philadelphia,
 L. H. MORGAN, of Rochester.

2. *Committee to Audit the Accounts of the Permanent Secretary and Treasurer.*

HENRY WHEATLAND, of Salem,	S. H. SCUDDER, of Cambridge.
----------------------------	------------------------------

MEETINGS.

MEETINGS AND OFFICERS OF THE AMERICAN ASSOCIATION OF GEOLOGISTS AND NATURALISTS.

MEETING.	DATE.	PLACE.	CHAIRMAN.	SECRETARY.	ASSIST. SEC'Y.	TREASURER.
1st	April 2, 1840,	Philadelphia,	Edward Hitchcock,*	L. C. Beck,*	{ B. Silliman, jr., C. B. Trego, J. D. Whitney, M. B. Williams,	John Locke.*
2d	April 5, 1841,	Philadelphia,	Benjamin Silliman,*	L. C. Beck,*		
3d	April 25, 1842,	Boston,	S. G. Morton,*	C. T. Jackson,		
4th	April 26, 1843,	Albany,	Henry D. Rogers,*	B. Silliman, jr.,	{ B. Silliman, jr., O. P. Hubbard, B. Silliman, jr., J. Lawrence Smith,	Douglas Houghton.*
5th	May 8, 1844,	Washington,	John Locke,*	{ B. Silliman, jr., O. P. Hubbard,		
6th	April 30, 1845,	New Haven,	Wm. B. Rogers,	{ B. Silliman, jr., J. Lawrence Smith,		
7th	Sept. 2, 1846,	New York,	C. T. Jackson,	B. Silliman, jr.,	E. C. Herrick.*	B. Silliman, jr.
8th	Sept. 20, 1847,	Boston,	Wm. B. Rogers,†	Jeffries Wyman,*		

* Deceased.

†Professor ROGERS, as chairman of this last meeting, called the first meeting of the new Association to order and presided until it was fully organized by the adoption of a constitution. As he was thus the first presiding officer of the new Association, it was directed at the Hartford meeting that his name be placed at the head of the Past Presidents of the American Association for the Advancement of Science.

MEETINGS AND OFFICERS OF THE AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE.

MEETINGS.

vii

MEETING.	DATE.	PLACE.	PRESIDENT.	VICE-PRESIDENT.	GENERAL SECRETARY.	PERMANENT SEC'Y.	TREASURER.
1st	Sept. 20, 1848,	Philadelphia, Pa.,	W. C. Redfield,*		Walter R. Johnson,*		Jeffries Wyman.*
2d	Aug. 14, 1849,	Cambridge, Mass.,	Joseph Henry,		E. N. Horsford, 1		A. L. Elwyn.
3d	Mar. 12, 1850,	Charleston, S. C.,	A. D. Bache,* 2		L. R. Gibbs, 3		St. J. Raveln.* 4
4th	Aug. 19, 1850,	New Haven, Conn.,	A. D. Bache,*		E. C. Herrick,*		A. L. Elwyn.
5th	May 5, 1851,	Cincinnati, Ohio,	A. D. Bache,*		W. B. Rogers, 5	S. F. Baird,	S. F. Baird. 6
6th	Aug. 19, 1851,	Albany, N. Y.,	Louis Agassiz,*		W. B. Rogers,	S. F. Baird,	A. L. Elwyn.
7th	July 28, 1853,	Cleveland, Ohio,	Benjamin Pierce,		S. St. John, 7	S. F. Baird,	A. L. Elwyn.
8th	April 26, 1854,	Washington, D. C.,	J. D. Dana,		J. Lawrence Smith,	Joseph Lovering,	J. L. LeConte. 8
9th	Aug. 15, 1855,	Providence, R. I.,	John Torrey,*		Wolcott Gibbs,	Joseph Lovering,	A. L. Elwyn.
10th	Aug. 20, 1856,	Albany, N. Y.,	James Hall,		B. A. Gould,	Joseph Lovering,	A. L. Elwyn.
11th	Aug. 12, 1857,	Montreal, Canada,	Alexis Caswell,	Alexis Caswell,	John LeConte,	Joseph Lovering,	A. L. Elwyn.
12th	April 28, 1858,	Baltimore, Md.,	Alexis Caswell, 10	John E. Holbrook,*†	W. M. Gillespie,* 11	Joseph Lovering,	A. L. Elwyn.
13th	Aug. 3, 1859,	Springfield, Mass.,	Stephen Alexander,	Edward Hitchcock,*	William Chauvenet,*	Joseph Lovering,	A. L. Elwyn.
14th	Aug. 1, 1860,	Newport, R. I.,	Isaac Lea,	B. A. Gould,	Joseph LeConte,	Joseph Lovering,	A. L. Elwyn.
15th	Aug. 15, 1866,	Buffalo, N. Y.,	F. A. P. Barnard,	A. A. Gould,* 12	Elias Loomis, 13	Joseph Lovering,	A. L. Elwyn.†
16th	Aug. 21, 1867,	Burlington, Vt.,	J. S. Newberry,	Wolcott Gibbs,	C. S. Lyman,	Joseph Lovering,	A. L. Elwyn.†
17th	Aug. 5, 1868,	Chicago, Ill.,	B. A. Gould,	Charles Whittlesey,	Simon Newcomb, 14	Joseph Lovering,	A. L. Elwyn.†
18th	Aug. 18, 1869,	Salem, Mass.,	J. W. Foster,*	O. N. Rood,	F. W. Putnam, 15	Joseph Lovering,	A. L. Elwyn.†
19th	Aug. 17, 1870,	Troy, N. Y.,	T. S. Hunt, 16	T. S. Hunt,	F. W. Putnam, 17	Joseph Lovering,	A. L. Elwyn.†
20th	Aug. 16, 1871,	Indianapolis, Ind.,	Asa Gray,	G. F. Barker,	F. W. Putnam,	Joseph Lovering,	W. S. Vaux.
21st	Aug. 15, 1872,	Dubuque, Iowa,	J. Lawrence Smith,	Alex. Winchell,	E. S. Morse,	Joseph Lovering,	W. S. Vaux.
22d	Aug. 20, 1873,	Portland, Me.,	Joseph Lovering,	A. H. Worthen,†	C. A. White,	F. W. Putnam,	W. S. Vaux.
23d	Aug. 12, 1874,	Hartford, Conn.,	J. L. LeConte,	C. S. Lyman,	A. C. Hamlin,	F. W. Putnam,	W. S. Vaux.†

1. In place of Jeffries Wyman, *not present*.
2. In place of Josiah Henry, *not present*.
3. In place of E. C. Herrick, *not present*.
4. In place of A. L. Elwyn, *not present*.
5. In place of E. C. Herrick, *not present*.
6. In place of A. L. Elwyn, *not present*.
7. In place of J. D. Dana, *not present*.
8. In place of A. L. Elwyn, *not present*.
9. In place of J. W. Bailey, *deceased*.
10. In place of Jeffries Wyman, *not present*.
11. In place of Wm. Chauvenet, *not present*.
12. In place of R. W. Gibbs, *not present*.
13. In place of W. P. Trowbridge, *not present*.
14. In place of A. P. Rockwell, *called home 1st day*.
15. In place of Joseph Lovering, *in Europe*.
16. In place of Wm. Chauvenet, *too ill to be present*.
17. In place of C. F. Hartt, *in Brazil*.

* Deceased.

† Not present at the meeting.

MEETINGS AND OFFICERS OF THE ASSOCIATION, CONTINUED.

MEETING.	DATE.	PLACE.	PRESIDENT.	VICE PRESIDENT, SECTION A.	VICE PRESIDENT, SECTION B.	CHAIRMAN OF PERMANENT SUBSECTION C, CHEMISTRY.	CHAIRMAN OF PERMANENT SUBSECTION D, ANTHROPOLOGY.
24th 25th	Aug. 11, 1875, Aug. 23, 1876,	Detroit, Mich., Buffalo, N. Y.,	J. E. Hilgard, William B. Rogers,	H. A. Newton, Charles A. Young,	J. W. Dawson, Edward S. Morse,	S. W. Johnson, George F. Barker,	L. H. Morgan, L. H. Morgan,

PERMANENT SECRETARY.	GENERAL SECRETARY.	SECRETARY OF SECTION A.	SECRETARY OF SECTION B.	SECRETARY OF PERMANENT SUBSECTION C, CHEMISTRY.	SECRETARY OF PERMANENT SUBSECTION D, ANTHROPOLOGY.	TREASURER.
F. W. Putnam,	S. H. Scudder,	{ S. P. Langley, T. C. Mendenhall,	E. S. Morse,	F. W. Clarke,	F. W. Putnam,	W. S. Vaux,
F. W. Putnam.	T. C. Mendenhall,	A. W. Wright,	Albert H. Tuttle,	— — — —	— — — —	W. S. Vaux.

COMMONWEALTH OF MASSACHUSETTS.

IN THE YEAR ONE THOUSAND EIGHT HUNDRED AND SEVENTY-FOUR.

AN ACT

TO INCORPORATE THE "AMERICAN ASSOCIATION FOR THE
ADVANCEMENT OF SCIENCE."

Be it enacted by the Senate and House of Representatives, in General Court assembled, and by the authority of the same, as follows:

SECTION 1. Joseph Henry of Washington, Benjamin Pierce of Cambridge, James D. Dana of New Haven, James Hall of Albany, Alexis Caswell of Providence, Stephen Alexander of Princeton, Isaac Lea of Philadelphia, F. A. P. Barnard of New York, John S. Newberry of Cleveland, B. A. Gould of Cambridge, T. Sterry Hunt of Boston, Asa Gray of Cambridge, J. Lawrence Smith of Louisville, Joseph Lovering of Cambridge and John LeConte of Philadelphia, their associates, the officers and members of the Association, known as the "American Association for the Advancement of Science," and their successors, are hereby made a corporation by the name of the "American Association for the Advancement of Science," for the purpose of receiving, purchasing, holding and conveying real and personal property, which it now is, or hereafter may be possessed of, with all the powers and privileges, and subject to the restrictions, duties and liabilities set forth in the general laws which now or hereafter may be in force and applicable to such corporations.

SECTION 2. Said corporation may have and hold by purchase, grant, gift or otherwise, real estate not exceeding one hundred thousand dollars in value, and personal estate of the value of two hundred and fifty thousand dollars.

SECTION 3. Any two of the corporators above named are hereby authorized to call the first meeting of the said corporation in the month of August next ensuing, by notice thereof "by mail," to each member of the said Association.

SECTION 4. This act shall take effect upon its passage.

HOUSE OF REPRESENTATIVES, March 10, 1874.

Passed to be enacted,

JOHN E. SANFORD, *Speaker*.

IN SENATE, March 17, 1874.

Passed to be enacted,

GEO. B. LORING, *President*.

March 19, 1874.

Approved,

W. B. WASHBURN.

SECRETARY'S DEPARTMENT,

Boston, April 3, 1874.

A true copy, Attest:

DAVID PULSIFER,

Deputy Secretary of the Commonwealth.

CONSTITUTION

OF THE

AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE.

Incorporated by Act of the General Court of the Commonwealth of Massachusetts.

OBJECTS.

ARTICLE 1. The objects of the Association are, by periodical and migratory meetings, to promote intercourse between those who are cultivating science in different parts of America, to give a stronger and more general impulse and more systematic direction to scientific research, and to procure for the labors of scientific men increased facilities and a wider usefulness.

MEMBERS, FELLOWS, PATRONS AND HONORARY FELLOWS.

ART. 2. The Association shall consist of Members, Fellows, Patrons and Honorary Fellows.

ART. 3. Any person may become a Member of the Association upon recommendation in writing by two members or fellows, nomination by the Standing Committee, and election by a majority of the members and fellows present in general session.

ART. 4. Fellows shall be nominated by the Standing Committee from such of the members as are professionally engaged in science, or have by their labors aided in advancing science. The election of fellows shall be by ballot and a majority vote of the members and fellows present in general session. But all persons who may be members at the time of the adoption of this constitution may become fellows by signifying their desire to this effect before the first day of August, 1875.

ART. 5. Any person paying to the Association the sum of one thousand dollars shall be classed as a Patron, and shall be entitled to all the privileges of a member and to all its publications.

ART. 6. Honorary Fellows of the Association, to the number of ten for each section, may be elected; the nominations to be made by the Standing Committee and approved by ballot in the respective sections before election by ballot in general session. Honorary Fellows shall be entitled to all the privileges of fellows and shall be exempt from all fees and assessments, and entitled to all publications of the Association issued after the date of their election.

ART. 7. The name of any member or fellow two years in arrears for annual dues shall be erased from the list of the Association, provided that two notices of indebtedness, at an interval of at least three months, shall have been given; and no such person shall be restored until he has paid his arrearages or has been reëlected.

ART. 8. No member or fellow shall take part in the organization or business of both sections at the same meeting.

OFFICERS.

ART. 9. The Officers of the Association shall be elected by ballot in general session from the fellows and shall consist of a President, two Vice Presidents, a General Secretary, a Permanent Secretary, a Treasurer, a Secretary of Section A, and a Secretary of Section B; these, with the exception of the Permanent Secretary, shall be elected at each meeting for the following one, and, with the exception of the Treasurer and the Permanent Secretary, shall not be reëligible for the next two meetings. The Permanent Secretary shall be elected at each fifth meeting.

ART. 10. The President, or, in his absence, one of the Vice Presidents, shall preside at all general sessions of the Association and at all meetings of the Standing Committee. It shall also be the duty of the President to give an address at a general session of the Association at the meeting following that over which he presided.

ART. 11. The Vice Presidents shall be the presiding officers of Sections A and B, and of the Sectional Committees, and it shall be part of their duty to give an address, each before his respective section, at such time as the section shall determine. The Vice Presidents may request their respective sections to appoint temporary chairmen to preside over the sessions of the sections, but shall not delegate their other duties.

ART. 12. The General Secretary shall be the Secretary of all general sessions of the Association, and of all sessions of the Standing Committee, and shall keep a record of the business of these sessions. He

shall receive the records from the Secretaries of the Sections, which, after examination, he shall transmit with his own records to the Permanent Secretary within two weeks after the adjournment of the meeting. He shall receive proposals for membership and bring them before the Standing Committee. He shall give to the Secretary of each Section the list of papers assigned to it by the Standing Committee.

ART. 13. The Permanent Secretary shall be the executive officer of the Association under the direction of the Standing Committee. He shall attend to all business not specially referred to committees nor otherwise constitutionally provided for. He shall keep an account of all business that he has transacted for the Association, and make annually at the first meeting of the Standing Committee, a report which shall be laid before the Association. He shall attend to the printing and distribution of the annual volume of Proceedings, and all other printing ordered by the Association. He shall issue a circular of information to members and fellows at least four months before each meeting, and shall, in connection with the Local Committee, make all necessary arrangements for the meetings of the Association. He shall provide the Secretaries of the Association with such books and stationery as may be required for their records and business, and shall provide members and fellows with such blank forms as may be required for facilitating the business of the Association. He shall collect all assessments and admission fees, and notify members and fellows of their election, and of any arrearages. He shall receive, and bring before the Standing Committee, the titles and abstracts of papers proposed to be read before the Association. He shall keep an account of all receipts and expenditures of the Association, and report the same annually at the first meeting of the Standing Committee, and, at the close of each year, shall pay over to the Treasurer such unexpended funds as the Standing Committee may direct. He shall receive and hold in trust for the Association all books, pamphlets and manuscripts belonging to the Association, and allow the use of the same under the provisions of the Constitution and the orders of the Standing Committee. He shall receive all communications addressed to the Association during the interval between meetings, and properly attend to the same. He shall at each meeting report the names of fellows and members who have died since the preceding meeting. He shall be allowed a salary which shall be determined by the Standing Committee, and may employ a clerk at such compensation as may be agreed upon by the Standing Committee.

ART. 14. The Treasurer shall invest the funds received by him in such securities as may be directed by the Standing Committee. He shall annually present to the Standing Committee an account of the funds in his charge. No expenditure of the principal in the hands of the Treasurer shall be made without a unanimous vote of the Standing Committee, and no expenditure of the income received by the Treasurer shall be made without a two-thirds vote of the Standing Committee.

ART. 15. The Secretaries of Sections A and B shall keep the records of their respective sections, and, at the close of the meeting, give the same, including the records of subsections, to the General Secretary. They shall also be the secretaries of the sectional committees.

ART. 16. In case of a vacancy in the office of the President, one of the Vice Presidents shall be elected by the Standing Committee as the President of the meeting. Vacancies in the offices of Vice President, General Secretary, Permanent Secretary and Treasurer, shall be filled by nomination of the Standing Committee and election by ballot in general session. A vacancy in the office of Secretary of a Section shall be filled by nomination and election by ballot in the section.

ART. 17. The Standing Committee shall consist of the past Presidents, the President, the Vice Presidents, the four Secretaries, the Treasurer, with the above named officers of the preceding meeting, and six fellows elected by ballot after open nomination at the first general session. The members present at any regularly called meeting of the Committee, provided there are at least five, shall form a quorum for the transaction of business. The Standing Committee shall meet on the day preceding each annual meeting of the Association, and arrange the programme for the first day of the sessions. The time and place of this first meeting shall be designated by the Permanent Secretary. Unless otherwise agreed upon, regular meetings of the Committee shall be held in the committee room at 9 o'clock, A.M., on each day of the meeting of the Association. Special meetings of the Committee may be called at any time by the President. The Standing Committee shall be the board of supervision of the Association, and no business shall be transacted by the Association that has not first been referred to, or originated with, the Committee. The special business of the Committee shall be: to receive and assign papers to the respective sections; to examine and, if necessary, to exclude papers; to decide which papers, discussions and other proceedings shall be published, and to have the general direction of

the publications of the Association; to manage the financial affairs of the Association; to arrange the business and programmes for general sessions; to appoint general sessions for the evening; to suggest subjects for discussion, investigation or reports; to nominate members and fellows; to receive and act upon all invitations extended to the Association and report the same at a general session of the Association.

ART. 18. The Nominating Committee shall consist of the Standing Committee, and four members or fellows elected by each of the sections. It shall be the duty of this Committee to meet at the call of the President and nominate the general officers for the following meeting of the Association. It shall also be the duty of this Committee to recommend the time and place for the next meeting. The Vice Presidents and Secretaries of the Sections shall be recommended to the Nominating Committee by sub-committees consisting of the Vice Presidents and Secretaries, and the four persons elected by each section under the first clause of this article.

MEETINGS.

ART. 19. The Association shall hold public meetings annually, for one week or longer, at such time and place as may be determined by vote of the Association, and the preliminary arrangements for each meeting shall be made by the Local Committee, in conjunction with the Permanent Secretary and such other persons as the Standing Committee may designate.

ART. 20. General Sessions shall be held at 10 o'clock, A. M., unless otherwise ordered, on every day of the meeting, Sunday excepted, and at such other times as may be appointed by the Standing Committee.

SECTIONS AND SUBSECTIONS.

ART. 21. The Association shall be divided into two Sections, namely: **A** (*Mathematics, Astronomy, Physics, Chemistry and Mineralogy*) and **B** (*Geology, Zoology, Botany and Anthropology*). Either Section may, at its pleasure, form temporary or permanent subsections for the reading of papers.

ART. 22. Immediately on the organization of a Section there shall be three fellows elected by ballot after open nomination, who, with the Vice President and Secretary, and the Chairman and Secretary of the subsections, shall form its Sectional Committee. The Sectional Com-

mittees shall have power to fill vacancies in their own numbers. There shall be no sectional meeting during a general session.

ART. 23. When any Subsection organizes, it shall elect a Chairman and Secretary and report the result to the Secretary of its Section. The Secretary of a Subsection shall, at the close of the meeting, transmit his records to the Secretary of the Section. Any Permanent Subsection may elect its Chairman for the ensuing meeting.

ART. 24. No paper shall be read in any Section or Subsection until it has been placed on the programme of the day by the Sectional Committees.

SECTIONAL COMMITTEES.

ART. 25. The Sectional Committees shall arrange and direct the business of their respective sections. They shall prepare the daily programmes and give them to the Permanent Secretary for printing at the earliest moment practicable. No titles of papers shall be entered on the daily programmes except such as have passed the Standing Committee. No change shall be made in the programme for the day without the consent of the Sectional Committee. The Sectional Committees may refuse to place the title of any paper on the programme; but every such title, with the abstract of the paper or the paper itself must be returned to the Standing Committee with the reasons why it was refused.

ART. 26. The Sectional Committees shall examine all papers and abstracts referred to the sections, and they shall not place on the programme any paper inconsistent with the character of the Association; and to this end they have power to call for any paper, the character of which may not be sufficiently understood from the abstract submitted.

PAPERS AND COMMUNICATIONS.

ART. 27. All members and fellows must forward to the Permanent Secretary, as early as possible, and when practicable before the convening of the Association, full titles of all the papers which they propose to present during the meeting, with a statement of the time that each will occupy in delivery, and also such abstracts of their contents as will give a general idea of their nature; and no title shall be referred by the Standing Committee to the Sectional Committee until an abstract of the paper or the paper itself has been received.

ART. 28. If the author of any paper be not ready at the time assigned, the title may be dropped to the bottom of the list.

506
AMA
1878

CONSTITUTION,
LIST OF MEETINGS,
COMMITTEES AND MEMBERS,
OF
THE AMERICAN ASSOCIATION
FOR THE
ADVANCEMENT OF SCIENCE,
FOR THE TWENTY-SEVENTH MEETING,
TO BE HELD AT
ST. LOUIS, MISSOURI,
AUGUST, 1878.

SALEM:
PUBLISHED BY THE PERMANENT SECRETARY.
1878.

CONSTITUTION,
LIST OF MEETINGS,
COMMITTEES AND MEMBERS,
OF
THE AMERICAN ASSOCIATION
FOR THE
ADVANCEMENT OF SCIENCE,
FOR THE TWENTY-SEVENTH MEETING,
TO BE HELD AT
ST. LOUIS, MISSOURI,
AUGUST, 1878.

SALEM:
PUBLISHED BY THE PERMANENT SECRETARY.
1878.

EDITED BY
FREDERICK W. PUTNAM,
Permanent Secretary.

PRINTED AT
THE SALEM PRESS,
SALEM, MASS.

506
AMA
1878

OFFICERS OF THE ASSOCIATION

ELECTED FOR

THE ST. LOUIS MEETING.

PRESIDENT.

O. C. MARSH, of New Haven.

VICE PRESIDENT, Section A.

R. H. THURSTON, of Hoboken.

VICE PRESIDENT, Section B.

A. R. GROTE, of Buffalo.

CHAIRMAN OF PERMANENT SUBSECTION OF CHEMISTRY.

F. W. CLARK, of Cincinnati.

CHAIRMAN OF PERMANENT SUBSECTION OF MICROSCOPY.

G. S. BLACKIE, of Nashville.

PERMANENT SECRETARY.

F. W. PUTNAM, of Cambridge.

GENERAL SECRETARY.

H. CARRINGTON BOLTON, of Hartford.

SECRETARY OF SECTION A.

F. E. NIPHER, of St. Louis.

SECRETARY OF SECTION B.

GEORGE LITTLE of Atlanta.

TREASURER.

WILLIAM S. VAUX, of Philadelphia.

STANDING COMMITTEE.

Past Presidents.—BENJAMIN PEIRCE, of Cambridge; JAMES D. DANA, of New Haven; JAMES HALL, of Albany; STEPHEN ALEXANDER, of Princeton; ISAAC LEA, of Philadelphia; F. A. P. BARNARD, of New York; J. S. NEWBERRY, of New York; B. A. GOULD, of Boston; T. STERRY HUNT, of Boston; ASA GRAY, of Cambridge; J. LAWRENCE SMITH, of Louisville; JOSEPH LOVERING, of Cambridge; JOHN L. LeCONTE, of Philadelphia; J. E. HILGARD, of Washington; WILLIAM B. ROGERS, of Boston.

The President, Vice Presidents, Secretaries and Treasurer of the Meeting.

Officers of the Preceding Meeting.—SIMON NEWCOMB, of Washington; EDWARD C. PICKERING, of Cambridge; WILLIAM H. DALL, of Washington.

From the Association at large.—Six Fellows to be elected on the first day of the meeting.

LOCAL COMMITTEE

FOR THE

ST. LOUIS MEETING.

Chairman :—Chancellor W. G. ELIOT.

Treasurer :—Judge CHARLES SPECK.

Secretary :—Prof. JOHN K. REES.

SUBCOMMITTEES.

Reception :—Hon. THOMAS ALLEN, *Chairman*; Henry Hitchcock, *Mayor* Overstoiz, James B. Eads, Theodore Meier, Thomas Richeson, Judge Samuel Treat, Wm. T. Harris, Dr. J. B. Johnson, Gen. J. H. Simpson, Gerard B. Allen, Dr. C. W. Stevens, Albert Todd, Dr. George Engelmann, J. R. Shepley, James E. Yeatman, George D. Hall, Dr. E. S. Lemoine, R. M. Scruggs, Gen. J. W. Turner, Judge Nathaniel Holmes, James O. Broadhead, John T. Davis, M. Dwight Collier, Capt. Silas Bent, Moses Fraley, Charles Parsons, Rev. J. C. Learned, Henry Shaw, Dr. Leet, Edwin Harrison, Dr. S. H. Sonneschein, J. K. Cummings, Wm. Glasgow, jr., Erastus Wells, John B. Maude, Julius S. Walsh, Rev. Dr. Niccolls, Nathan Cole, M. J. Lippman, Rev. Dr. M. Schuyler, Judge H. M. Jones, Morris Rosenheim, D. R. Garrison, S. M. Dodd, Judge Lindley, Prof. W. B. Potter, Hon. Enos Clarke, Prof. F. E. Nipher, A. Krieckhaus.

Finance :—Judge CHARLES SPECK, *Chairman*; George Bain, E. O. Standard, R. M. Scruggs, Thomas E. Tutt, M. Fraley, John B. Maude, Charles Barstow, S. H. Laflin, Auguste Frank, George J. Engelmann, Regis Chauvenet, W. J. Lemp, Dr. W. C. Glasgow, John N. Dyer, Adolph Busch, Wm. M. Senter, Wm. P. Shryock.

Excursions and Entertainments :—GEORGE BAIN, *Chairman*; E. T. Allen, E. A. Hitchcock, Eben Richards, John A. Scudder, D. K. Ferguson, Rev. John Snyder, C. P. Johnson, Isidor Bush.

Railroads :—WM. TAUSSIG, *Chairman*; John E. Simpson, C. W. Bradley, Wm. Duncan, John J. Mitchell, C. C. Cobb, A. W. Soper, George H. Heafford, James F. Howe, R. P. Tansey.

Printing :—ENNO SANDER, *Chairman*; Wm. Hyde, D. M. Houser, B. M. Chambers, John A. Dillon, Carl Daenzer, E. Prectorius, A. E. Levison, R. P. Studley.

Telegraph and Mail :—CHAUNCEY I. FILLEY, *Chairman*; Col. R. C. Clowry.

Microscopes :—Dr. GEORGE J. ENGELMANN, *Chairman*; Dr. John Green, Dr. A. Litton, Dr. G. Hambach.

Arrangements :—W. H. PULSIFER, *Chairman*; Prof. W. B. Potter, E. C. Simmons, F. A. Churchill.

SPECIAL COMMITTEES.

A. COMMITTEES CONTINUED FROM FORMER MEETINGS.

1. *Permanent Committee on Weights, Measures and Coinage.*

F. A. P. BARNARD, of New York, WOLCOTT GIBBS, of Cambridge, B. A. GOULD, of Boston, J. E. HILGARD, of Washington, JOHN LeCONTE, of Oakland, Cal.,	H. A. NEWTON, of New Haven, BENJAMIN PEIRCE, of Cambridge, WILLIAM B. ROGERS, of Boston, J. LAWRENCE SMITH, of Louisville, E. B. ELLIOTT, of Washington.
---	--

2. *Committee to Memorialize the Legislature of New York for a New Survey of Niagara Falls.*

F. A. P. BARNARD, of New York, CHARLES P. DALY, of New York,	JAMES HALL, of Albany, G. W. HOLLEY, of Niagara Falls.
---	---

3. *Committee to Memorialize Congress and State Legislatures regarding the Cultivation of Timber, and the Preservation of Forests.*

F. B. HOUGH, of Lowville, ASA GRAY, of Cambridge, G. B. EMERSON, of Boston, J. D. WHITNEY, of Cambridge,	J. S. NEWBERRY, of Cleveland, L. H. MORGAN, of Rochester, CHAS. WHITTLESEY, of Cleveland, W. H. BREWER, of New Haven, E. W. HILGARD, of Berkeley.
---	---

4. *Committee on International Congress of Geologists.*

WILLIAM B. ROGERS, of Boston; JAMES HALL, of Albany; J. W. DAWSON, of Montreal; J. S. NEWBERRY, of New York; T. STERRY HUNT, of Boston; C. H. HITCHCOCK, of Hanover; RAPHAEL PUMPELLY, of Owego; J. P. LESLEY, of Philadelphia; in connection with Dr. OTTO TORRELL, of Stockholm; Dr. E. H. VON BAUMHAUER, of Haarlem; Prof. T. H. HUXLEY, of London; Prof. A. C. RAMSAY, of London; and the Presidents of the Geological Societies of France, London, Edinburgh, Dublin, Berlin, Belgium, Italy, Spain, Portugal, and the Imperial Geological Institute of Vienna.

5. *Committee to Audit the Accounts of the Permanent Secretary and Treasurer.*

HENRY WHEATLAND, of Salem,	S. H. SCUDDER, of Cambridge.
----------------------------	------------------------------

B. NEW COMMITTEES.

1. *Committee to obtain Permanent Funds for the Association, and to advise with Treasurer and Permanent Secretary on financial matters.*

[The members of this Committee to be appointed at St. Louis Meeting.]

2. *Committee to memorialize Congress in relation to the Yellowstone National Park.*

T. B. COMSTOCK, of Ithaca; O. C. MARSH, of New Haven; GEORGE M. WHEELER, of Washington; J. W. POWELL, of Washington.

3. *Committee on the Introduction of Science into the Schools.*

J. D. RUNKLE, of Boston; A. R. GROTE, of Buffalo; N. S. SHALER, of Cambridge; J. W. POWELL, of Washington; N. T. LUPTON, of Nashville.

4. *Committee on the Relation of Science to the Industrial Arts.*

R. H. THURSTON, of Hoboken; J. M. SAFFORD, of Nashville; T. C. MENDENHALL, of Columbus; J. T. WILDER, of Chattanooga; O. CHANUTE, of New York.

5. *Committee to Memorialize Congress in relation to Meteorological Researches.*

ELIAS LOOMIS, of New Haven; N. S. SHALER, of Cambridge; G. HINRICHs, of Iowa City; J. B. KILLEBREW, of Nashville.

MEETINGS AND OFFICERS OF THE AMERICAN ASSOCIATION OF GEOLOGISTS AND NATURALISTS.

MEETING.	DATE.	PLACE.	CHAIRMAN.	SECRETARY.	ASSIST. SEC'Y.	TREASURER.
1st	April 2, 1840,	Philadelphia,	Edward Hitchcock,*	L. C. Beck,*	{ B. Silliman, jr., C. B. Trego, J. D. Whitney, M. B. Williams,	John Locke.* Douglas Houghton.* Douglas Houghton.* E. C. Herrick.* B. Silliman, jr.
2d	April 5, 1841,	Philadelphia,	Benjamin Silliman,*	L. C. Beck,*		
3d	April 25, 1842,	Boston,	S. G. Morton,*	C. T. Jackson,		
4th	April 26, 1843,	Albany,	Henry D. Rogers,*	B. Silliman, jr.,		
5th	May 8, 1844,	Washington,	John Locke,*	{ B. Silliman, jr., O. P. Hubbard,		
6th	April 30, 1845,	New Haven,	Wm. B. Rogers,	{ B. Silliman, jr., J. Lawrence Smith,		
7th	Sept. 2, 1846,	New York,	C. T. Jackson,	B. Silliman, jr.,		
8th	Sept. 20, 1847,	Boston,	Wm. B. Rogers,†	Jeffries Wyman,*		

* Deceased.

†Professor ROGERS, as chairman of this last meeting, called the first meeting of the new Association to order and presided until it was fully organized by the adoption of a constitution. As he was thus the first presiding officer of the new Association, it was directed at the Hartford meeting that his name be placed at the head of the Past Presidents of the American Association for the Advancement of Science.

MEETINGS AND OFFICERS OF THE AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE.

MEETING.	DATE.	PLACE.	PRESIDENT.	VICE-PRESIDENT.	GENERAL SECRETARY.	PERMANENT SEC'Y.	TREASURER.
1st	Sept. 20, 1848,	Philadelphia, Pa.,	W. C. Redfield,*	Alexis Caswell,*	Walter R. Johnson,*		Jeffries Wyman.*
2d	Aug. 14, 1849,	Cambridge, Mass.,	Joseph Henry,*	John E. Holbrook,*†	E. N. Horsford, 1		A. L. Elwyn.
3d	Mar. 12, 1850,	Charleston, S. C.,	A. D. Bache,* 2	Edward Hitchcock,*	L. R. Gibbs, 3		St. J. Ravenel.* 4
4th	Aug. 19, 1850,	New Haven, Conn.,	A. D. Bache,*	B. A. Gould,	E. C. Herrick,*		A. L. Elwyn.
5th	May 5, 1851,	Cincinnati, Ohio,	A. D. Bache,*	Wolcott Gibbs,	W. B. Rogers, 5	S. F. Baird,	S. F. Baird. 6
6th	Aug. 19, 1851,	Albany, N. Y.,	Louis Agassiz,*	John Torrey,*	W. B. Rogers,	S. F. Baird,	A. L. Elwyn.
7th	July 28, 1853,	Cleveland, Ohio,	Benjamin Pierce,	James Hall,	S. St. John, 7	S. F. Baird,	A. L. Elwyn.
8th	April 26, 1854,	Washington, D.C.,	J. D. Dana,	Alexis Caswell,* 9	J. Lawrence Smith,	Joseph Lovering,	J. L. LeConte. 8
9th	Aug. 15, 1855,	Providence, R. I.,	John Torrey,*	Alexis Caswell,* 10	Wolcott Gibbs,	Joseph Lovering,	A. L. Elwyn.
10th	Aug. 20, 1856,	Albany, N. Y.,	James Hall,	Stephen Alexander,	B. A. Gould,	Joseph Lovering,	A. L. Elwyn.
11th	Aug. 12, 1857,	Montreal, Canada,	Alexis Caswell,* 9	Isaac Lea,	John LeConte,	Joseph Lovering,	A. L. Elwyn.
12th	April 28, 1858,	Baltimore, Md.,	Alexis Caswell,* 10	F. A. P. Barnard,	W. M. Gillespie,* 11	Joseph Lovering,	A. L. Elwyn.
13th	Aug. 3, 1859,	Springfield, Mass.,	Stephen Alexander,	Edward Hitchcock,*	William Chauvenet,*	Joseph Lovering,	A. L. Elwyn.
14th	Aug. 1, 1860,	Newport, R. I.,	Isaac Lea,	B. A. Gould,	Joseph LeConte,	Joseph Lovering,	A. L. Elwyn.
15th	Aug. 15, 1866,	Buffalo, N. Y.,	F. A. P. Barnard,	A. A. Gould,* 12	Elias Loomis, 13	Joseph Lovering,	A. L. Elwyn.†
16th	Aug. 21, 1867,	Burlington, Vt.,	J. S. Newberry,	Wolcott Gibbs,	C. S. Lyman,	Joseph Lovering,	A. L. Elwyn.†
17th	Aug. 5, 1868,	Chicago, Ill.,	B. A. Gould,	Charles Whittlesey,	Simon Newcomb, 14	Joseph Lovering,	A. L. Elwyn.†
18th	Aug. 18, 1869,	Salem, Mass.,	J. W. Foster,*	O. N. Rood,	O. C. Marsh,	F. W. Putnam, 15	A. L. Elwyn.†
19th	Aug. 17, 1870,	Troy, N. Y.,	T. S. Hunt, 16	T. S. Hunt,	F. W. Putnam, 17	Joseph Lovering,	A. L. Elwyn.†
20th	Aug. 16, 1871,	Indianapolis, Ind.,	Asa Gray,	G. F. Barker,	F. W. Putnam,	Joseph Lovering,	W. S. Vaux.
21st	Aug. 15, 1872,	Dubuque, Iowa,	J. Lawrence Smith,	Alex. Winchell,	E. S. Morse,	Joseph Lovering,	W. S. Vaux.
22d	Aug. 20, 1873,	Portland, Me.,	Joseph Lovering,	A. H. Worthen,†	C. A. White,	F. W. Putnam,	W. S. Vaux.
23d	Aug. 12, 1874,	Hartford, Conn.,	J. L. LeConte,	C. S. Lyman,	A. C. Hamlin,	F. W. Putnam,	W. S. Vaux.†

1. In place of Jeffries Wyman, *not present*.
2. In place of Joseph Henry, *not present*.
3. In place of E. C. Herrick, *not present*.
4. In place of A. L. Elwyn, *not present*.
5. In place of E. C. Herrick, *not present*.
6. In place of A. L. Elwyn, *not present*.
7. In place of J. D. Dana, *not present*.
8. In place of A. L. Elwyn, *not present*.
9. In place of J. W. Bailey, *deceased*.
10. In place of Jeffries Wyman, *not present*.
11. In place of Wm. Chauvenet, *not present*.
12. In place of R. W. Gibbs, *not present*.
13. In place of W. P. Trowbridge, *not present*.
14. In place of A. L. Elwyn, *not present*.
15. In place of Joseph Lovering, *not present*.
16. In place of Wm. Chauvenet, *not present*.
17. In place of C. F. Hartt, *not present*.
* Deceased. † Not present at the meeting.

MEETINGS AND OFFICERS OF THE ASSOCIATION (*Continued*).

MEET- ING.	DATE.	PLACE.	PRESIDENT.	VICE PRESIDENT, SECTION A.
24th	Aug. 11, 1875.	Detroit, Mich.,	J. E. Hilgard,	H. A. Newton,
25th	Aug. 23, 1876,	Buffalo, N. Y.,	William B. Rogers,	Charles A. Young,
26th	Aug. 29, 1877,	Nashville, Tenn.,	Simon Newcomb,	R. H. Thurston, ¹

VICE PRESIDENT, SECTION B.	CHAIRMAN OF PERMANENT SUBSECTION C, CHEMISTRY.	CHAIRMAN OF PERMANENT SUBSECTION D, ANTHROPOLOGY.	CHAIRMAN OF PERMANENT SUBSECTION E, MICROSCOPY.
J. W. Dawson, Edward S. Morse, O. C. Marsh,	S. W. Johnson, George F. Barker, N. T. Lupton,	L. H. Morgan, L. H. Morgan, Daniel Wilson,*	— — — — R. H. Ward, R. H. Ward,

PERMANENT SECRETARY.	GENERAL SECRETARY.	SECRETARY OF SECTION A.	SECRETARY OF SECTION B.
F. W. Putnam, F. W. Putnam, F. W. Putnam,	S. H. Scudder, T. C. Mendenhall, Aug. R. Grote,	{ S. P. Langley, T. C. Mendenhall, A. W. Wright, H. C. Bolton,	E. S. Morse, Albert H. Tuttle, Wm. H. Dall,

SECRETARY OF PERMANENT SUBSECTION C, CHEMISTRY.	SECRETARY OF PERMANENT SUBSECTION D, ANTHROPOLOGY.	SECRETARY OF PERMANENT SUBSECTION E, MICROSCOPY.	TREASURER.
F. W. Clarke, H. C. Bolton, P. Schweitzer,	F. W. Putnam, O. T. Mason, — — — — ²	— — — — E. W. Morley, T. O. Summers, jr.,	W. S. Vaux. W. S. Vaux. W. S. Vaux.*

¹ In the absence of E. C. Pickering. ² The Subsection united with Sec. B. *Not present.

COMMONWEALTH OF MASSACHUSETTS.

IN THE YEAR ONE THOUSAND EIGHT HUNDRED AND SEVENTY-FOUR.

AN ACT

TO INCORPORATE THE "AMERICAN ASSOCIATION FOR THE
ADVANCEMENT OF SCIENCE."

Be it enacted by the Senate and House of Representatives, in General Court assembled, and by the authority of the same, as follows:

SECTION 1. Joseph Henry of Washington, Benjamin Pierce of Cambridge, James D. Dana of New Haven, James Hall of Albany, Alexis Caswell of Providence, Stephen Alexander of Princeton, Isaac Lea of Philadelphia, F. A. P. Barnard of New York, John S. Newberry of Cleveland, B. A. Gould of Cambridge, T. Sterry Hunt of Boston, Asa Gray of Cambridge, J. Lawrence Smith of Louisville, Joseph Lovering of Cambridge and John LeConte of Philadelphia, their associates, the officers and members of the Association, known as the "American Association for the Advancement of Science," and their successors, are hereby made a corporation by the name of the "American Association for the Advancement of Science," for the purpose of receiving, purchasing, holding and conveying real and personal property, which it now is, or hereafter may be possessed of, with all the powers and privileges, and subject to the restrictions, duties and liabilities set forth in the general laws which now or hereafter may be in force and applicable to such corporations.

SECTION 2. Said corporation may have and hold by purchase, grant, gift or otherwise, real estate not exceeding one hundred thousand dollars in value, and personal estate of the value of two hundred and fifty thousand dollars.

SECTION 3. Any two of the corporators above named are hereby authorized to call the first meeting of the said corporation in the month of August next ensuing, by notice thereof "by mail," to each member of the said Association.

SECTION 4. This act shall take effect upon its passage.

HOUSE OF REPRESENTATIVES, March 10, 1874.

Passed to be enacted,

JOHN E. SANFORD, *Speaker*.

IN SENATE, March 17, 1874.

Passed to be enacted,

GEO. B. LORING, *President*.

March 19, 1874.

Approved,

W. B. WASHBURN.

SECRETARY'S DEPARTMENT,

Boston, April 3, 1874.

A true copy, Attest:

DAVID PULSIFER,

Deputy Secretary of the Commonwealth.

CONSTITUTION

OF THE

AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE.

Incorporated by Act of the General Court of the Commonwealth of Massachusetts.

OBJECTS.

ARTICLE 1. The objects of the Association are, by periodical and migratory meetings, to promote intercourse between those who are cultivating science in different parts of America, to give a stronger and more general impulse and more systematic direction to scientific research, and to procure for the labors of scientific men increased facilities and a wider usefulness.

MEMBERS, FELLOWS, PATRONS AND HONORARY FELLOWS.

ART. 2. The Association shall consist of Members, Fellows, Patrons and Honorary Fellows.

ART. 3. Any person may become a Member of the Association upon recommendation in writing by two members or fellows, nomination by the Standing Committee, and election by a majority of the members and fellows present in general session.

ART. 4. Fellows shall be nominated by the Standing Committee from such of the members as are professionally engaged in science, or have by their labors aided in advancing science. The election of fellows shall be by ballot and a majority vote of the members and fellows present in general session. But all persons who may be members at the time of the adoption of this constitution may become fellows by signifying their desire to this effect before the first day of August, 1875.

ART. 5. Any person paying to the Association the sum of one thousand dollars shall be classed as a Patron, and shall be entitled to all the privileges of a member and to all its publications.

ART. 6. Honorary Fellows of the Association, to the number of ten for each section, may be elected; the nominations to be made by the Standing Committee and approved by ballot in the respective sections before election by ballot in general session. Honorary Fellows shall be entitled to all the privileges of fellows and shall be exempt from all fees and assessments, and entitled to all publications of the Association issued after the date of their election.

ART. 7. The name of any member or fellow two years in arrears for annual dues shall be erased from the list of the Association, provided that two notices of indebtedness, at an interval of at least three months, shall have been given; and no such person shall be restored until he has paid his arrearages or has been reelected.

ART. 8. No member or fellow shall take part in the organization or business of both sections at the same meeting.

OFFICERS.

ART. 9. The Officers of the Association shall be elected by ballot in general session from the fellows and shall consist of a President, two Vice Presidents, a General Secretary, a Permanent Secretary, a Treasurer, a Secretary of Section A, and a Secretary of Section B; these, with the exception of the Permanent Secretary, shall be elected at each meeting for the following one, and, with the exception of the Treasurer and the Permanent Secretary, shall not be reëligible for the next two meetings. The Permanent Secretary shall be elected at each fifth meeting.

ART. 10. The President, or, in his absence, one of the Vice Presidents, shall preside at all general sessions of the Association and at all meetings of the Standing Committee. It shall also be the duty of the President to give an address at a general session of the Association at the meeting following that over which he presided.

ART. 11. The Vice Presidents shall be the presiding officers of Sections A and B, and of the Sectional Committees, and it shall be part of their duty to give an address, each before his respective section, at such time as the section shall determine. The Vice Presidents may request their respective sections to appoint temporary chairmen to preside over the sessions of the sections, but shall not delegate their other duties.

ART. 12. The General Secretary shall be the Secretary of all general sessions of the Association, and of all sessions of the Standing Committee, and shall keep a record of the business of these sessions. He

shall receive the records from the Secretaries of the Sections, which, after examination, he shall transmit with his own records to the Permanent Secretary within two weeks after the adjournment of the meeting. He shall receive proposals for membership and bring them before the Standing Committee. He shall give to the Secretary of each Section the list of papers assigned to it by the Standing Committee.

ART. 13. The Permanent Secretary shall be the executive officer of the Association under the direction of the Standing Committee. He shall attend to all business not specially referred to committees nor otherwise constitutionally provided for. He shall keep an account of all business that he has transacted for the Association, and make annually at the first meeting of the Standing Committee, a report which shall be laid before the Association. He shall attend to the printing and distribution of the annual volume of Proceedings, and all other printing ordered by the Association. He shall issue a circular of information to members and fellows at least four months before each meeting, and shall, in connection with the Local Committee, make all necessary arrangements for the meetings of the Association. He shall provide the Secretaries of the Association with such books and stationery as may be required for their records and business, and shall provide members and fellows with such blank forms as may be required for facilitating the business of the Association. He shall collect all assessments and admission fees, and notify members and fellows of their election, and of any arrearages. He shall receive, and bring before the Standing Committee, the titles and abstracts of papers proposed to be read before the Association. He shall keep an account of all receipts and expenditures of the Association, and report the same annually at the first meeting of the Standing Committee, and, at the close of each year, shall pay over to the Treasurer such unexpended funds as the Standing Committee may direct. He shall receive and hold in trust for the Association all books, pamphlets and manuscripts belonging to the Association, and allow the use of the same under the provisions of the Constitution and the orders of the Standing Committee. He shall receive all communications addressed to the Association during the interval between meetings, and properly attend to the same. He shall at each meeting report the names of fellows and members who have died since the preceding meeting. He shall be allowed a salary which shall be determined by the Standing Committee, and may employ a clerk at such compensation as may be agreed upon by the Standing Committee.

ART. 14. The Treasurer shall invest the funds received by him in such securities as may be directed by the Standing Committee. He shall annually present to the Standing Committee an account of the funds in his charge. No expenditure of the principal in the hands of the Treasurer shall be made without a unanimous vote of the Standing Committee, and no expenditure of the income received by the Treasurer shall be made without a two-thirds vote of the Standing Committee.

ART. 15. The Secretaries of Sections A and B shall keep the records of their respective sections, and, at the close of the meeting, give the same, including the records of subsections, to the General Secretary. They shall also be the secretaries of the sectional committees.

ART. 16. In case of a vacancy in the office of the President, one of the Vice Presidents shall be elected by the Standing Committee as the President of the meeting. Vacancies in the offices of Vice President, General Secretary, Permanent Secretary and Treasurer, shall be filled by nomination of the Standing Committee and election by ballot in general session. A vacancy in the office of Secretary of a Section shall be filled by nomination and election by ballot in the section.

ART. 17. The Standing Committee shall consist of the past Presidents, the President, the Vice Presidents, the four Secretaries, the Treasurer, with the above named officers of the preceding meeting, and six fellows elected by ballot after open nomination at the first general session. The members present at any regularly called meeting of the Committee, provided there are at least five, shall form a quorum for the transaction of business. The Standing Committee shall meet on the day preceding each annual meeting of the Association, and arrange the programme for the first day of the sessions. The time and place of this first meeting shall be designated by the Permanent Secretary. Unless otherwise agreed upon, regular meetings of the Committee shall be held in the committee room at 9 o'clock, A.M., on each day of the meeting of the Association. Special meetings of the Committee may be called at any time by the President. The Standing Committee shall be the board of supervision of the Association, and no business shall be transacted by the Association that has not first been referred to, or originated with, the Committee. The special business of the Committee shall be: to receive and assign papers to the respective sections; to examine and, if necessary, to exclude papers; to decide which papers, discussions and other proceedings shall be published, and to have the general direction of

the publications of the Association; to manage the financial affairs of the Association; to arrange the business and programmes for general sessions; to appoint general sessions for the evening; to suggest subjects for discussion, investigation or reports; to nominate members and fellows; to receive and act upon all invitations extended to the Association and report the same at a general session of the Association.

ART. 18. The Nominating Committee shall consist of the Standing Committee, and four members or fellows elected by each of the sections. It shall be the duty of this Committee to meet at the call of the President and nominate the general officers for the following meeting of the Association. It shall also be the duty of this Committee to recommend the time and place for the next meeting. The Vice Presidents and Secretaries of the Sections shall be recommended to the Nominating Committee by sub-committees consisting of the Vice Presidents and Secretaries, and the four persons elected by each section under the first clause of this article.

MEETINGS.

ART. 19. The Association shall hold public meetings annually, for one week or longer, at such time and place as may be determined by vote of the Association, and the preliminary arrangements for each meeting shall be made by the Local Committee, in conjunction with the Permanent Secretary and such other persons as the Standing Committee may designate.

ART. 20. General Sessions shall be held at 10 o'clock, A. M., unless otherwise ordered, on every day of the meeting, Sunday excepted, and at such other times as may be appointed by the Standing Committee.

SECTIONS AND SUBSECTIONS.

ART. 21. The Association shall be divided into two Sections, namely: **A** (*Mathematics, Astronomy, Physics, Chemistry and Mineralogy*) and **B** (*Geology, Zoology, Botany and Anthropology*). Either Section may, at its pleasure, form temporary or permanent subsections for the reading of papers.

ART. 22. Immediately on the organization of a Section there shall be three fellows elected by ballot after open nomination, who, with the Vice President and Secretary, and the Chairman and Secretary of the subsections, shall form its Sectional Committee. The Sectional Com-

mittees shall have power to fill vacancies in their own numbers. There shall be no sectional meeting during a general session.

ART. 23. When any Subsection organizes, it shall elect a Chairman and Secretary and report the result to the Secretary of its Section. The Secretary of a Subsection shall, at the close of the meeting, transmit his records to the Secretary of the Section. Any Permanent Subsection may elect its Chairman for the ensuing meeting.

ART. 24. No paper shall be read in any Section or Subsection until it has been placed on the programme of the day by the Sectional Committees.

SECTIONAL COMMITTEES.

ART. 25. The Sectional Committees shall arrange and direct the business of their respective sections. They shall prepare the daily programmes and give them to the Permanent Secretary for printing at the earliest moment practicable. No titles of papers shall be entered on the daily programmes except such as have passed the Standing Committee. No change shall be made in the programme for the day without the consent of the Sectional Committee. The Sectional Committees may refuse to place the title of any paper on the programme; but every such title, with the abstract of the paper or the paper itself must be returned to the Standing Committee with the reasons why it was refused.

ART. 26. The Sectional Committees shall examine all papers and abstracts referred to the sections, and they shall not place on the programme any paper inconsistent with the character of the Association; and to this end they have power to call for any paper, the character of which may not be sufficiently understood from the abstract submitted.

PAPERS AND COMMUNICATIONS.

ART. 27. All members and fellows must forward to the Permanent Secretary, as early as possible, and when practicable before the convening of the Association, full titles of all the papers which they propose to present during the meeting, with a statement of the time that each will occupy in delivery, and also such abstracts of their contents as will give a general idea of their nature; and no title shall be referred by the Standing Committee to the Sectional Committee until an abstract of the paper or the paper itself has been received.

ART. 28. If the author of any paper be not ready at the time assigned, the title may be dropped to the bottom of the list.

REPORTS OF MEETINGS.

ART. 29. Whenever practicable, the proceedings and discussions at general sessions, sections and subsections shall be reported by professional reporters, but such reports shall not appear in print as the official reports of the Association unless revised by the secretaries.

PRINTED PROCEEDINGS.

ART. 30. The Permanent Secretary shall have the Proceedings of each meeting printed in an octavo volume as soon after the meeting as possible, beginning one month after adjournment. Authors must prepare their papers ready for the press and forward them to the Permanent Secretary within this interval, otherwise only the abstracts or titles will appear in the printed volumes. The Standing Committee shall have power to print an abstract only of any paper. Whenever practicable, proofs shall be forwarded to authors for revision. If any additions or substantial alterations are made by the author of a paper after its submission to the Secretary, the same shall be distinctly indicated. Illustrations must be provided for by the authors of the papers, or by a special appropriation from the Standing Committee. Immediately on publication of the volume, a copy shall be forwarded to every member and fellow of the Association who shall have paid the assessment for the meeting to which it relates, and it shall also be offered for sale by the Permanent Secretary at such price as may be determined by the Standing Committee. The Standing Committee shall also designate the institutions to which copies shall be distributed.

LOCAL COMMITTEE.

ART. 31. The Local Committee shall consist of persons interested in the objects of the Association and residing at or near the place of the proposed meeting. It is expected that the Local Committee, assisted by the officers of the Association, will make all essential arrangements for the meeting, and issue a circular giving necessary particulars, at least one month before the meeting.

LIBRARY OF THE ASSOCIATION.

ART. 32. All books and pamphlets received by the Association shall be in the charge of the Permanent Secretary, who shall have a list of the same printed and shall furnish a copy to any member or fellow on application. Members and fellows who have paid their assessments in full

shall be allowed to call for books and pamphlets, which shall be delivered to them at their expense, on their giving a receipt agreeing to make good any loss or damage and to return the same free of expense to the Secretary at the time specified in the receipt given. All books and pamphlets in circulation must be returned at each meeting, or the value of any not so returned paid to the Permanent Secretary. Not more than ten books, including volumes, parts of volumes, and pamphlets, shall be held at one time by any member or fellow. Any book may be withheld from circulation by order of the Standing Committee.

ADMISSION FEE AND ASSESSMENTS.

ART. 33. The admission fee for members shall be five dollars in addition to the annual assessment. On the election of any member as a fellow an additional fee of two dollars shall be paid.

ART. 34. The annual assessment for members and fellows shall be three dollars.

ART. 35. Any member or fellow who shall pay the sum of fifty dollars to the Association, at any one time, shall be exempt from all further assessments, but this payment shall not entitle him to the publications of the Association, and all money thus received shall be invested as a permanent fund, the income of which shall be used only to assist in original research.

ART. 36. All admission fees and assessments must be paid to the Permanent Secretary, who shall give proper receipts for the same.

ACCOUNTS.

ART. 37. The accounts of the Permanent Secretary and of the Treasurer shall be audited annually, by two auditors appointed by the Standing Committee.

ALTERATIONS OF THE CONSTITUTION.

ART. 38. No part of this Constitution shall be amended or annulled, without the concurrence of three-fourths of the members and fellows present in general session, after notice given at a general session of a preceding meeting of the Association.

ORDER OF PROCEEDINGS

IN

ORGANIZING A MEETING.

1. The retiring President introduces the President elect, who takes the chair.
2. Formalities of welcome of the Association as may be arranged by the Local Committee.
3. Report of the list of papers on the register and their reference to the Sections.
4. Other reports.
5. Announcements of arrangements by the Local Committee.
6. Elections to complete the Standing Committee.
7. Election of members.
8. Election of fellows.
9. Unenumerated business.
10. Adjournment to meet in Sections.

This order, so far as applicable, to be followed in subsequent General Sessions.

(xix)

MEMBERS
OF THE
AMERICAN ASSOCIATION
FOR THE
ADVANCEMENT OF SCIENCE.¹

PATRON.²

Thompson, Mrs. Elizabeth, Stamford, Conn. (22). (Entitled to annual volume.)

LIFE MEMBERS.³

Case, Leonard, Cleveland, Ohio (15).

Elwyn, Alfred L., Philadelphia, Pa. (1).

Harkness, Prof. Wm., U. S. N., U. S. Observatory, Washington, D. C. (26).

Lyman, Benj. Smith, care Smith, Archer & Co., Yokohama, Japan (15).

Robertson, Thomas D., Rockford, Ill. (10).

Stephens, W. Hudson, Lowville, N. Y. (18). (Entitled to annual volume.)

Vaux, William S., 1702 Arch St., Philadelphia, Pa. (1). (Entitled to annual volume.)

Warner, James D., 199 Baltic St., Brooklyn, N. Y. (18).

MEMBERS.

Abbe, George W., 32 East 20th St., New York (23).

Abbot, Miss Elizabeth O., 16 Clark St., Cincinnati, Ohio (20).

Acheson, Edward G. (25).

Adcock, Prof. Robert J., Monmouth, Warren Co., Ill. (21).

Aikin, Prof. W. E. A., Baltimore, Md. (12).

Ainsworth, Frank B., Sup't Ind. House of Refuge, Plainfield, Ind. (20).

¹The numbers in parentheses indicate the meeting at which the member was elected. The Constitution requires that the names of all members two or more years in arrears shall be omitted from the list, but their names will be restored on payment of arrearages. Members not in arrears are entitled to the annual volume of Proceedings.

²Persons contributing one thousand dollars or more to the Association are classed as Patrons, are exempt from the annual assessments and are entitled to the annual volume.

³Any Member or Fellow may become a Life Member by the payment of fifty dollars. The money derived from Life Memberships is invested as a fund, the income of which is to be used only to aid in original research. Life Members are exempt from the annual assessment, and an additional payment of ten dollars entitles a Life Member to the annual volume.

- Albert, Augustus J., Baltimore, Md. (12).
 Alexander, Prof. Stephen, Princeton, N. J. (1).
 Allen, H. R., Indianapolis, Ind. (24).
 Allen, J. M., Hartford, Conn. (22).
 Allen, Stephen M., 28 State St., Boston, Mass. (23).
 Ammen, Daniel, Commodore U. S. Navy, Washington, D. C. (26).
 Armsby, Henry P., Box 48, New Haven, Conn. (23).
 Armstrong, Rev. John W., D.D., State Normal School, Fredonia, N. Y. (24).
 Arthur, J. C., Charles City, Iowa. (21).
 Atchison, Prof. Thos. A., University of Nashville, Nashville, Tenn. (26).
 Atkinson, Jno. B., Earlington, Hopkins Co., Ky. (26).
 Atwater, Mrs. Samuel T., 166 Washington St., Chicago, Ill. (17).
 Atwell, W. H., Care Atwell and Sneed, Nashville, Tenn. (26).
 Austen, Peter T., Ph. D., Rutger's College, Lock Box No. 2, New Brunswick, N. J. (26).
 Austin, Mrs. E. P., Cambridge, Mass. (24).
- Babbitt, Henry S., M.D., Columbus, Ohio (23).
 Babcock, Prof. Samuel S., Mt. Clemens, Macomb Co., Mich. (24).
 Bailey, E. H. S., Bethlehem, Pa. (25).
 Baird, Alexander J., D.D., Nashville, Tenn. (26).
 Baker, Prof. Arthur L., Lafayette College, Easton, Pa. (24).
 Baker, Prof. T. R., Millersville, Lancaster Co., Pa. (22).
 Balch, David M., Salem, Mass. (22).
 Bandelier, Ad. F., Highland, Ill. (25).
 Barber, Edwin A., Westchester, Chester Co., Pa. (25).
 Barnard, Edward E., Nashville, Tenn. (26).
 Barnard, Jas. M., Boston, Mass. (18).
 Barnard, Wm. Stebbins, Canton, Ill. (24).
 Barnett, Prof. Samuel, jr., Washington, Wilkes Co., Ga. (26).
 Barry, Sir Redmond, President Public Library of Melbourne, Victoria, Australia (25).
 Bassett, George W., M.D., Vandalia, Ill. (20).
 Bassnett, Thomas, Jacksonville, Fla. (8).
 Bassnett, Mrs. Thomas, Jacksonville, Fla. (24).
 Bastian, Dr. David I., Clinton, Worcester Co., Mass. (25).
 Bate, Gen. Wm. Brimage, Nashville, Tenn. (26).
 Batterson, J. G., Hartford, Conn. (23).
 Bausch, Edward, Rochester, N. Y. (26).
 Beach, Charles M., Merchant, Hartford, Conn. (23).
 Beach, J. Watson, Merchant, Hartford, Conn. (23).
 Beach, William H., Beloit, Wis. (21).
 Beal, Prof. Wm. James, Agricultural College, Lansing, Mich. (24).
 Becker, Hon. Philip, Buffalo, N. Y. (25).
 Bell, Prof. Alex. Graham, Boston University, Boston, Mass. (26).
 Bell, John J., Exeter, N. H. (22).
 Bemis, Hon. A. S., President of the Common Council, Buffalo, N. Y. (25).

- Benjamin, E. B., 10 Barclay St., New York (19).
Bessels, Dr. Emil, Smithsonian Institution, Washington, D. C. (26).
Bessey, Prof. C. E., Agricultural College, Ames, Iowa (21).
Bickmore, Prof. Albert S., Am. Mus. of Nat. Hist., Central Park, N. Y. (17).
Bill, Charles, Springfield, Mass. (17).
Blackham, Dr. George E., Dunkirk, N. Y. (25).
Blair, Henry Wayne, U. S. Coast Survey, Lexington, Va. (26).
Blake, W. P., Geologist, New Haven, Conn. (2).
Blatchford, Eliphalet W., 375 North La Salle St., Chicago, Ill. (17).
Blois, John T., Jonesville, Hillsdale Co., Mich. (24).
Bohrer, Charles J., Lafayette, Ind. (25).
Bolles, Rev. E. C., Salem, Mass. (17).
Boss, Prof. Lewis, Director Dudley Observatory, Albany, N. Y. (26).
Bowen, Edmund S., General Supt. Erie Railway, New York (25).
Bowen, Lemuel W., care D. M. Ferry & Co., 203 Woodward Ave., Detroit, Mich. (24).
Bowles, Miss Margaretta, P. O. Box 25, Louisville, Ky. (26).
Bowron, James, Supt. Southern Mining Co., South Pittsburg, Tenn. (26).
Braden, John, D.D., Pres. Central College, Nashville, Tenn. (26).
Breneman, A. A., Ithaca, N. Y. (20).
Briggs, Albert D., 7 Fort Block, Springfield, Mass. (13).
Briggs, Charles S., Vanderbilt University, Nashville, Tenn. (26).
Brigham, Rev. Charles H., Ann Arbor, Mich. (17).
Brooks, Major Thos. B., Geologist State Surveys Mich. and Wis., Newburgh, N. Y. (26).
Broomall, Hon. John M., Media, Delaware Co., Pa. (23).
Brown, Mrs. Ashley, 115 Wilkinson St., Dayton, Ohio (25).
Brown, Hon. John C., Vice President, Texas and Pacific R. R. Co., Pulaski, Tenn. (26).
Brown, Rev. John Reese, D.D., Nashville, Tenn. (26).
Brush, Dr. Edward N., Buffalo N. Y. (25).
Bryan, Malachi Thomas, Nashville, Tenn. (26).
Bryan, Oliver N., Accokeek P. O., Prince George's Co., Md. (18).
Buckhout, W. A., State College, Centre Co., Pa. (20).
Buist, John Robinson, M.D., Pres. Nashville Board of Health, Nashville, Tenn. (26).
Bull, Dr. Alexander T., 98 Swan St., Buffalo, N. Y. (25).
Bush, Stephen, Waterford, N. Y. (19).
- Cadman, Charles C., Merchants' & Manufacturers' Bank, Detroit, Mich. (24).
Caldwell, John W., M.D., Stewart College, Clarksville, Tenn. (26).
Calthrop, Rev. S. R., Syracuse, N. Y. (25).
Campbell, A. C., Nashville, Tenn. (26).
Campbell, Mrs. Mary H., Crawfordsville, Ind. (22).
Canby, William M., 1101 Delaware Avenue, Wilmington, Del. (17).
Canfield, Rev. Eli H., D.D., Arlington, Bennington Co., Vt. (25).

- Capen, Miss Bessie T., Smith College, Northampton, Mass. (23).
 Carpenter, Prof. G. C., Simpson Centenary College, Indianola, Iowa (22).
 Carrington, Col. Henry B., U.S.A., Prof. in Wabash College, Crawfordsville, Ind. (20).
 Case, L. B., Richmond, Indiana (17).
 Cassino, S. E., Naturalists' Agency, Salem, Mass. (25).
 Caswell, John H., 11 West 48th Street, New York. (26).
 Cattell, William C., President Lafayette College, Easton, Pa. (15).
 Chandler, Henry, Lewis Block, Buffalo, N. Y. (25).
 Chapman, F. M., Danforth, Iroquois Co., Ill. (17).
 Charbonier, Prof. L. H., University of Georgia, Athens, Ga. (26).
 Chase, Prof. F. A., Fisk University, Nashville, Tenn. (26).
 Chase, Prof. Pliny E., Haverford College, Haverford, Pa. (18).
 Chase, R. Stuart, 16 Merrimack St., Haverhill, Mass. (18).
 Chase, Theodore R., Detroit, Mich. (24).
 Choate, Prof. Isaac B., Buchtel College, Akron, Ohio (25).
 Clark, Simeon T., M.D., Lockport, Niagara Co., N. Y. (25).
 Clinton, Hon. George W., Buffalo, N. Y. (25).
 Coe, Miss Emily M., 33 West 45th St., New York (25).
 Coffinberry, W. L., Grand Rapids, Mich. (20).
 Cogswell, Dr. George, Bradford, Mass. (18).
 Collin, Prof. Alonzo, Cornell College, Mount Vernon, Iowa (21).
 Colman, Henry, M.D., 1483 Washington St., Boston, Mass. (25).
 Colton, G. Woolworth, 172 William St., New York (22).
 Colyar, John B., Nashville, Tenn. (26).
 Cook, Prof. A. J., Agricultural College, Lansing, Mich. (24).
 Cook, Dr. Charles D., 133 Pacific St., Brooklyn, N. Y. (25).
 Cooke, Caleb, Peabody Academy of Science, Salem, Mass. (18).
 Cooley, Prof. Le Roy C., Vassar College, Poughkeepsie, N. Y. (19).
 Copes, Dr. Joseph S., New Orleans, La. (11).
 Corwin, Richard W., Michigan University, Ann Arbor, Mich. (24).
 Coxe, Eckley B., Drifton, Jeddo P. O., Luzerne Co., Pa. (23).
 Crehore, John D., 458 Prospect St., Cleveland, Ohio (24).
 Cross, Japheth, Adrian, Mich. (24).
 Cummings, John, Woburn, Mass. (18).
 Curtis, Rev. W. S., D.D., Rockford, Ill. (21).
 Cusick, Cornelius C., Lieut. 22nd Reg. Infantry, U.S.A., Washington, D. C. (24).
 Cutter, John D., 1208 Pacific St., Brooklyn, L. I. (23).
 Dake, J. P., M.D., 47 North Vine St., Nashville, Tenn. (26).
 Davis, George T., Portland, Me. (23).
 DeCamp, Dr. William H., Grand Rapids, Mich. (21).
 Delano, Joseph C., New Bedford, Mass. (5).
 Detviller, H. J., Bethlehem, Pa. (26).
 Devereux, J. H., President C.C.C. & I.R.R., Cleveland, Ohio (18).
 DeWitt, Marcus Bearden, Nashville, Tenn. (26).

Dinwiddie, Prof. James, Clarksville, Tenn. (26).
Dixwell, Epes S., Cambridge, Mass. (1).
Dodd, C. M., Williamstown, Mass. (19).
Doggett, Mrs. Kate N., Chicago, Ill. (17).
Doggett, Wm. E., Chicago, Ill. (17).
Doolittle, Prof. C. L., South Bethlehem, Pa. (25).
Dorr, Capt. E. P., 280 Niagara St., Buffalo, N. Y. (25).
Doughty, John W., Newburgh, N. Y. (19).
Douglas, Prof. Samuel T., Ann Arbor, Mich. (24).
Douglas, Prof. Silas H., Ann Arbor, Mich. (24).
Draughon, John A., M.D., Nashville, Tenn. (26).
Drowne, Charles, care William L. Drowne, Esq., Canaan Four Corners,
New York (6).
Drumm, Rev. Thomas, St. Mark's School, Rochester, N. Y. (25).
Dudley, Charles B., Altoona, Pa. (23).
Dunnington, Prof. F. P., University of Virginia, Charlottesville, Va. (26).
Duschak, Adolf, 13 Chippewa St., Buffalo, N. Y. (25).
Dyer, Clarence, Lawrence, Mass. (22).
Dyer, Elisha, 26 Westminster St., Providence, R. I. (9).

Eakin, John H., M. A., Nashville, Tenn. (26).
East, Addison A., M.D., Supt. University Hospital, Nashville, Tenn. (26).
Eastman, Prof. J. R., U. S. Naval Observatory, Washington, D. C. (26).
Eaton, Hon. John, U. S. Commiss'r of Education, Washington, D. C. (25).
Eaton, Lucien B., Memphis, Tenn. (26).
Edgar, Col. George M., Principal of Edgar Institute, Paris, Ky. (20).
Edwards, A. Mead, M.D., Berkeley, Alameda Co., Cal. (18).
Elliott, Arthur H., Highlands Chem. and Mining Co., Highlands Station,
Putnam Co., N. Y. (23).
Elliott, George B., Nashville, Tenn. (26).
Ellis, Wm. Hodgson, Trinity College, Toronto, Canada (25).
Emmerton, Mrs. W. H., Salem, Mass. (26).
Emmons, S. F., P. O. Box 2218, Cheyenne, Wyoming Territory (26).
Endemann, Hermann, Ph. D., Ass't Sanitary Inspector, 128 Worth St.,
New York. (26).
Engelmann, Dr. Geo. J., 3003 Locust St., St. Louis, Mo. (25).
Enloe, Thos. E., M.D., Nashville, Tenn. (26).
Ennis, Jacob, Principal Scientific Inst., Philadelphia, Pa. (19).
Evans, Thos. Wyche, jr., Nashville, Tenn. (26).
Everts, Miss M. M., care Rev. W.W. Everts, D.D., Chicago, Ill. (22).

Faries, R. J., Wauwatosa, Wis. (21).
Farnam, Charles H., New Haven, Conn. (25).
Farnam, Prof. J. E., Georgetown, Ky. (26).
Farquharson, Dr. Robert James, Davenport, Iowa (24).

- Fernald, Prof. Charles H., State Agricultural College, Orono, Me. (22).
Fernald, Prof. M. C., State Agricultural College, Orono, Me. (22).
Ficklin, Prof. Joseph, University of Missouri, Columbia, Mo. (20).
Fisher, Prof. Davenport, 642 Marshall St., Milwaukee, Wis. (17).
Fite, C. C., M.D., Shelbyville, Tenn. (26).
Fletcher, Ingram, care Fletcher & Sharpe, Indianapolis, Ind. (20).
Flint, D. B., Watertown, Mass. (25).
Ford, Albert C., U. S. Signal Service, Nashville, Tenn. (26).
Foreman, Henry L., U. S. Signal Service, Washington, D. C. (23).
Forshey, Col. C. G., New Orleans, La. (21).
Fosgate, Dr. Blanchard, Auburn, N. Y. (7).
Foster, Henry, M.D., Clifton, N. Y. (17).
Foster, Prof. Robert V., Lebanon, Wilson Co., Tenn. (26).
Foster, Wilbur F., Nashville, Tenn. (26).
Frazer, Prof. Persifor, jr., Ass't Geologist 2nd Geol. Survey of Pa., 917 Clinton St., Philadelphia, Pa. (24).
Frazier, Prof. B. W., The Lehigh University, Bethlehem, Pa. (24).
French, Dr. Geo. F., 666 Congress St., Portland, Me. (22).
Frothingham, Rev. Frederick, Milton, Mass. (11).
Fuller, A. S., Ridgewood, Bergen Co., N. J. (24).
Fulton, Prof. Robert B., University of Mississippi, Oxford, Miss. (21).

Gale, Dr. Edward R., Nashville, Tenn. (26).
Garbett, Wm. A., 8 and 10 Guild Building, Boston Highlands, Mass. (22).
Gardner, James T., Am. Geog. Soc., 11 W. 29th St., New York (25).
Garnett, Algernon S., M.D., Hot Springs, Arkansas (23).
Garrett, Ellwood, Wilmington, Newcastle County, Del. (22).
Gaskill, Joshua, Lockport, N. Y. (22).
Gatting, Dr. R. J., Hartford, Conn. (23).
Gattinger, August, M.D., Nashville, Tenn. (26).
Gerard, Aristide, New Orleans, La. (26).
Gibbs, Col. Charles N., Sec'y of State, Nashville, Tenn. (26).
Gibbs, R. M. W., Kalamazoo, Mich. (24).
Glenny, William H., jr., Buffalo, N. Y. (25).
Gold, Theodore S., West Cornwall, Conn. (4).
Goldschmidt, S. A., 59 & 61 Liberty St., New York (24).
Gooch, Frank A., Cambridge, Mass. (25).
Goodfellow, Edward, U. S. Coast Survey Office, Washington, D. C. (24).
Goold, W. N. (22).
Gould, Prof. B. A., care H. McMurtrie, P. O. Box 2414, Boston, Mass. (2).
Gould, Sylvester C., Manchester, N. H. (22).
Graham, Rev. William, Nashville, Tenn. (26).
Grant, J. F., M.D., Pulaski, Giles Co., Tenn. (26).
Green, J. C., M.D., Buffalo, N. Y. (25).
Green, Dr. Samuel E., 25th St., Pittsburgh, Pa. (22).
Greene, Jacob L., Sec. Mut. Life Ins. Co., Hartford, Conn. (23).
Gregory, Prof. J. J. H., Marblehead, Mass. (18).

- Gridley, Albert L., Benzonia, Mich. (25).
Grinnell, George Bird, Yale College Museum, New Haven, Conn. (25).
Grossklaus, John F., Navarre, Ohio (24).
Gundlach, Ernst, Rochester, N. Y. (25).
Gunning, William D., Waltham, Mass. (22).

Haggard, W. D., M.D., Nashville, Tenn. (26).
Hague, Arnold, 23 Fifth Avenue, New York. (26).
Hall, Israel, Ann Arbor, Mich. (24).
Hambach, Dr. G., 2802½ Cass Avenue, St. Louis, Mo. (26).
Hamel, Prof. Thomas E., Laval University, Quebec, Canada (18).
Hanaman, C. E., Troy, N. Y. (19).
Harger, Oscar, Yale College Museum, New Haven, Conn. (25).
Hart, Rev. Prof. Samuel, Trinity College, Hartford, Conn. (22).
Harvey, Charles W., Sup't Public Schools, Greensburg, Ind. (20).
Harvey, Dr. Leon F., Buffalo, N. Y. (22).
Hastings, Charles S., Johns Hopkins University, Baltimore, Md. (25).
Hatfield, Marcus P., M.D., Chicago Medical College, Chicago, Ill. (23).
Hawkins, Marion S., 60 High St., Nashville, Tenn. (26).
Hayes, George E., 1125 Main Street, Buffalo, N. Y. (15).
Hazen, E. H., M.D., Davenport, Iowa (25).
Henderson, John G., Winchester, Ill. (25).
Hensel, Martin, Columbus, Ohio (25).
Herdman, W. J., Ann Arbor, Mich. (24).
Hervey, Rev. A. B., Troy, N. Y. (22).
Hicks, John D., Old Westbury, Queen's Co., L. I. (23).
Higgins, F. W., Detroit, Mich. (24).
Higginson, John A., 260 Clarendon St., Boston, Mass. (26).
Hinds, Prof. J. I. D., Cumberland University, Lebanon, Tenn. (26).
Hogg, Prof. Alexander, College Station, Brazos Co., Texas. (26).
Holbrook, Francis N., E. M., School of Mines, Columbia College, New York. (26).
Holley, George W., Niagara Falls, N. Y. (19).
Holmes, John C., Room No. 41 Moffat Block, Detroit, Mich. (24).
Homes, Henry A., Librarian State Library, Albany, N. Y. (11).
Hopkirk, Prof. W. H., Burlington, Iowa (24).
Hornaday, William T., Rochester, N. Y. (25).
Horr, Asa, M.D., Dubuque, Iowa (21).
House, John C., Union Gas Works, Waterford, N. Y. (19).
Houston, George M., Harrisonville, Mo. (26).
Howard, Miss Catharine L., Springfield, Mass. (25).
Howe, Dr. Lucien, 9 Niagara St., Buffalo N. Y. (25).
Howell, Edwin E., Rochester, N. Y. (25).
Hoyte, James W., M.D., Nashville, Tenn. (26).
Hubbard, George W., M.D., Nashville, Tenn. (26).
Hubbard, H. G., Detroit, Mich. (24).
Hubbard, Mrs. Sara A., 31 Thirty-third St., Chicago, Ill. (17).

- Humphrey, D., M.D., Lawrence, Mass. (18).
Humphreys, A. W., Box 1384, New York (20).
Hunt, Miss Sarah E., Salem, Mass. (20).
Hunting, Rev. S. S., Pres. Davenport Academy Natural Sciences, Davenport, Iowa. (26).
Huntington, Prof. Chester, Clinton, Oneida Co., N. Y. (26).
Hyde, E. W., University of Cincinnati, Cincinnati, O. (25).

Ingram, Mrs. A., Nashville, Tenn. (26).
Irish, Thomas M., 58 Prairie St., Dubuque, Iowa (21).
Irving, Roland D., Wisconsin State Geological Survey, Madison, Wis. (26).
Isawa, Shuji, care G. Attwood, 53 State St., Boston, Mass. (26).
Isom, John F., Cleveland, Ohio (24).

Jackson, Thomas J., Nashville, Tenn. (26).
James, Frederick H., M.D., Lancaster, N. Y. (25).
James, Thomas Potts, Cambridge, Mass. (22).
Jarvis, George C., M.D., Hartford, Conn. (23).
Jasper, Gustavus A., 12 Central St., Boston, Mass. (18).
Jewell, Pliny, Mineralogical Amateur, Hartford, Conn. (23).
Jewell, Theo. F., Lt. Comdr. U.S.N., Coast Survey Office, Washington, D. C. (25).
Jillson, Dr. B. C., Pittsburg, Pa. (14).
Johnson, Prof. Hosmer A., Academy of Sciences, Chicago, Ill. (22).
Johnston, J. Frank, Bethlehem, Pa. (25).
Jones, Prof. Richard W., University of Mississippi, Oxford, Miss. (25).
Jones, Dr. Wm. L., Ed. Southern Cultivator, Athens, Ga. (26).
Jones, Wm. P., M.D., Pres. Nashville Med. College, Nashville, Tenn. (26).
Joy, Prof. Charles A., Stockbridge, Mass. (8).

Keely, Prof. G. W., Waterville, Me. (1).
Kellogg, John H., M.D., Battle Creek, Mich. (24).
Kent, William, Pittsburgh, Pa. (26).
Killebrew, J. B., Commissioner of Agriculture, Nashville, Tenn. (26).
Kinder, Miss Sarah, 27 Lockerbie St., Indianapolis, Ind. (20).
King, Clarence, U. S. Geol. Expl. of the 40th Parallel, 23 Fifth Ave., New York. (26).
King, Ephraim L., M.D., Box 251, Ashtabula, Ohio (24).
King, Mrs. Mary B. A., 21 Madison St., Rochester, N. Y. (15).
Kinner, Dr. Hugo, 1517 South Seventh St., St. Louis, Mo. (21).
Kirkpatrick, James A., 19 South Fifth St., Philadelphia, Pa. (7).
Kirkpatrick, Prof. Richard L., Knoxville, Tenn. (26).
Kite, Thomas, Gen'l Agent Washington Life Ins. Co. of N. Y., 122 Vine St., Cincinnati, O. (5).
Klippart, John H., Cor. Sec'y State Board of Agriculture, Box 1453, Columbus, Ohio (17).

Knapp, Frederick N., Plymouth, Mass. (19).
Kneeland, Dr. Samuel, Mass. Institute Technology, Boston, Mass. (20).
Knight, J. B., care Franklin Institute, Philadelphia, Pa. (21).
Kocsis, Alexander, Tullahoma, Ala. (26).

Lakes, Prof. Arthur, State School of Mines, Golden City, Colorado (26).
Land, William J., P. O. Box 305, Atlanta, Ga. (25).
Lawrence, Hon. Edw., Pres't Bunker Hill National Bank, Charlestown, Mass. (18).
Lea, John McCormack, Nashville, Tenn. (26).
Ledoux, Albert R., Ph. D., State Chemist, Chapel Hill, N. C. (26).
Leland, Eugene R., Eau Claire, Wis. (25).
Lesley, Joseph, 233 South Fourth St., Philadelphia, Pa. (8).
Letchworth, Josiah, Buffalo, N. Y. (25).
Lewis, Elias, jr., 111 St. Mark's Ave., Brooklyn, N. Y. (23).
Lewis, George A., 10 Lewis Block, Buffalo, N. Y. (25).
Lewis, Henry C., E. Washington Lane, Germantown, Pa. (26).
Lewis, James, Mohawk, N. Y. (25).
Lindsley, Adrian Van S., Sec'y University of Nashville, Tenn. (26).
Lindsley, Adrian Van S., jr., Nashville, Tenn. (26).
Lindsley, Miss Louise, Nashville, Tenn. (26).
Lindsley, Miss Mary McG., Nashville, Tenn. (26).
Lindsley, Van Sinderen, M.D., Nashville, Tenn. (26).
Losey, L. L., Nashville, Tenn. (26).
Loudon, Prof. James, Toronto, Canada (25).
Love, Edward G., School of Mines, Columbia College, New York (24).
Lovewell, Prof. Joseph T., State College, Centre Co., Pa. (25).
Lowry, Prof. Thos. J., Columbia P. O., Boone Co., Mo. (26).
Lunn, Miss Emma, Montreal, Canada (24).
Lyford, Prof. Moses, Waterville, Me. (22).

MacArthur, Charles L., Troy, N. Y. (19).
Mack, William, M.D., Salem, Mass. (21).
Macloskie, Prof. George, College of New Jersey, Princeton, N. J. (25).
Macy, Arthur, M. E., 26 Cedar Street, New York (26).
Maghee, J. Holme, 16 East 54th St., New York, (26).
Mallery, Brevet Lieut. Col. Garrick, Captain 1st Infantry, U. S. Army, detailed with the U. S. Geogr. and Geol. Surv., Rocky Mt. Region, Washington, D. C. (26).
Mansfield, J. M., Mt. Pleasant, Iowa (25).
Marden, George H., 7 Parker St., Charlestown, Mass. (18).
Mark, Edward L., Fredonia, N. Y. (21).
Martin, Prof. B. N., 236 W. 4th St., New York (23).
Martin, Prof. Daniel S., Rutgers Female College, New York (23).
Martindale, Isaac C., 322 Penn St., Camden, N. J. (26).
Mathews, Robert, 28 Spring St., Rochester, N. Y. (25).

- Maxwell, J. M. (24).
 Maycock, Prof. M. M., Buffalo, N. Y. (25).
 McClung, Calvin M., Knoxville, Tenn. (26).
 McCutchen, Aug. R., Dalton, Ga. (25).
 McMurtrie, Horace, P. O. Box 2414, Boston, Mass. (17).
 McNeal, Albert T., Bolivar, Tenn. (26).
 McRae, John, Camden, S. C. (3).
 McWhorter, Tyler, Aledo, Ill. (20).
 Metcalf, Caleb B., Highland Military Academy, Worcester, Mass. (20).
 Michelson, A. A., Ensign U. S. Navy, Annapolis, Md. (26).
 Milburn, John G., Buffalo, N. Y. (25).
 Miller, John A., Box 110, Paducah, Ky. (22).
 Miller, S. A., Cincinnati, Ohio. (26).
 Minifie, William, 14 Baltimore St., Baltimore, Md. (12).
 Moffatt, Dr. George T., Boston, Mass. (25).
 Moody, Mrs. Mary B., 187 N. Pearl St., Buffalo, N. Y. (25).
 Moore, Edward M., M.D., Rochester, N. Y. (25).
 Morehouse, Geo. W., Wayland, Steuben Co., N. Y. (24).
 Morison, Dr. N. H., Provost of Peabody Institute, Baltimore, Md. (17).
 Morris, John B., Nashville, Tenn. (26).
 Moses, Prof. Thos. F., Urbana University, Urbana, Ohio (25).
 Mudge, Benjamin F., Manhattan, Riley Co., Kansas (25).
 Muir, John, 1419 Taylor St., San Francisco, Cal. (22).
 Mulford, S. P., Marysville, Ohio (24).
 Munroe, Prof. Henry S., School of Mines, Columbia College, N. Y. (26).
 Murray, Charles H., Louisville, Clay Co., Ill. (24).
- Nelson, Anson, Recording Sec'y Tenn. Hist. Society, Nashville, Tenn. (26).
 Newman, John S., 48 East Washington St., Indianapolis, Ind. (20).
 Newman, Mrs. John S., 48 East Washington St., Indianapolis, Ind. (21).
 Newton, Rev. John, Mary Esther, West Fla. (7).
 Nichols, Charles A., Providence, R. I. (17).
 Nicholson, Prof. Hunter, Knoxville, Tenn. (26).
 Nicholson, Thomas, M.D., 490 Magazine St., New Orleans, La. (21).
 Norwood, Charles J., Ass't Kentucky Geological Survey, Russellville, Kentucky. (26).
 Nowlin, John B. W., M.D., Nashville, Tenn. (26).
 Noyes, Dr. James F., 101 Shelby St., Detroit, Mich. (24).
- Ogden, Mahlon D., Chicago, Ill. (17).
 Olmsted, Fred. Law, Commissioner of Public Parks, 209 W. 46th St., New York (22).
 Ordway, Prof. John M., Mass. Inst. Technology, Boston, Mass. (9).
 Osborne, Mrs. Ada M., Waterville, Oneida Co., N. Y. (19).
 Osborne, Amos O., Waterville, Oneida Co., N. Y. (19).

- Paine, Charles, Gen. Supt. Lake Shore & Southern Railway Co., Cleveland, Ohio. (22).
- Palmer, Rev. Benj. M., Box 1762, New Orleans, La. (21).
- Palmer, Dr. Edward, care Peabody Museum, Cambridge, Mass. (22).
- Parvin, Theodore S., Iowa City, Iowa (7).
- Patterson, James S., Nashville, Tenn. (26).
- Patterson, John P., Supt. Instruction, Washington C. H., Ohio (25).
- Paul, Caroline A., M.D., Vineland, Cumberland Co., N. J. (23).
- Peabody, Prof. F. Downing, Hopkinsville, Ky. (26).
- Peck, W. A., C. E., Idaho Springs, Clear Creek Co., Col. (19).
- Peet, Rev. Stephen D., Ashtabula, Ohio (24).
- Peirce, Prof. Benjamin, Cambridge, Mass. (1).
- Percival, Rev. Chester S., Rockford, Ill. (21).
- Perkins, Prof. George H., Burlington, Vt. (17).
- Perkins, T. Lyman, Salem, Mass. (22).
- Phelps, Gen. Charles E., Baltimore, Md. (13).
- Phelps, Mrs. Almira Lincoln, Baltimore, Md. (13).
- Philbrick, Prof. Philetus H., Iowa City, Iowa (23).
- Phillips, A. W., New Haven, Conn. (24).
- Phillips, Prof. Charles, Univ. of North Carolina, Chapel Hill, N. C. (25).
- Phin, John, Ed. Am. Journ. Microscopy, 176 Broadway, New York (25).
- Pickett, Dr. Thos. E., Maysville, Mason Co., Ky. (25).
- Pigue, Edward H., Nashville, Tenn. (26).
- Pillsbury, John H., 58 Pynchon St., Springfield, Mass. (23).
- Pitt, Prof. William H., Buffalo, N. Y. (25).
- Plunket, James D., M.D., Pres. State Bd. of Health, Nashville, Tenn. (26).
- Porteous, John, 26 Prince Arthur Street, Montreal, Canada (22).
- Porter, F. T., Nashville, Tenn. (26).
- Potter, Prof. William B., Washington University, St. Louis, Mo. (25).
- Pratt, William H., 513 Perry St., Davenport, Iowa (17).
- Preston, Prof. W. C., Laboratory, Iowa State Univ., Iowa City, Iowa (21).
- Prichitt, Samuel, Nashville, Tenn. (26).
- Prince, Gen. Henry, U.S.A., Headquarters of the Army, San Francisco, Cal. (22).
- Procter, John R., Ass't Ky. Geol. Survey, Frankfort, Ky. (26).
- Prosser, Wm. F., Nashville, Tenn. (26).
- Pruyn, John V. L., Chancellor Univ. of N.Y., 13 Elk St., Albany, N.Y. (1).
- Pulsifer, Sidney, Peoria, Ill. (21).
- Pulsifer, Wm. H., St. Louis, Mo. (26).
- Putnam, Mrs. F. W., Cambridge, Mass. (19).
- Putnam, George P., Buffalo, N. Y. (25).
- Ramsdell, Hon. J. G., Traverse City, Mich. (24).
- Rau, Dr. Charles, Smithsonian Institution, Washington, D. C. (24).
- Rees, Prof. John K., Washington University, St. Louis, Mo. (26).
- Richards, Mrs. Robert H., Mass. Inst. of Technology, Boston, Mass. (23).

- Ricketts, Pierre de Peyster, Ph.D., School of Mines, Columbia College, New York (26).
- Riggs, Geo. W., jr., Washington University, St. Louis, Mo. (26).
- Rivers, E. R., Agricultural and Mechanical College, Auburn, Ala. (26).
- Robertson, Col. Robert S., Fort Wayne, Ind. (20).
- Robinson, Henry C., Lawyer, Hartford, Conn. (23).
- Robinson, Prof. Otis Hall, Rochester, N. Y. (23).
- Rockwell, Alfred P., Eastern R. R., Boston, Mass. (10).
- Rodgers, Rear Adm. C. R. P., Supt. Naval Academy, Annapolis, Md. (26).
- Rogers, A. J., Milwaukee, Wis. (25).
- Rogers, Hon. Sherman S., Buffalo, N. Y. (25).
- Rominger, Carl, M.D., Ann Arbor, Mich. (21).
- Root, Prof. Elihu, Amherst College, Amherst, Mass. (25).
- Rose, Prof. P. B., Ann Arbor, Mich. (23).
- Rosenspitz, Rev. Alexander, Nashville, Tenn. (26).
- Rumsey, Bronson C., 58 and 60 Exchange St., Buffalo, N. Y. (15).
- Russell, I. C., School of Mines, New York (25).
- Russell, L. W., Providence, R. I. (20).
- Russell, W. H. H., 322 Chestnut St., cor. 4th, St. Louis, Mo. (24).
- Rust, Horatio N., cor. Rush & Kinsie streets, Chicago, Ill. (26).
- Safford, Charles W., Rutland, Vt. (26).
- Sage, John H., Portland, Conn. (23).
- Sampson, Com'd W. T., U.S.N., Naval Academy, Annapolis, Md. (25).
- Sanders, Benjamin D., Wellsburg, Brooke County, W. Va. (19).
- Scammon, J. Young, Chicago, Ill. (17).
- Schanck, Prof. J. Stillwell, Princeton, New Jersey (4).
- Schmelter, Henry, P. O. Box 2135, New York (25).
- Schmid, Dr. H. Ernest, White Plains, N. Y. (25).
- Scobey, James E., Pres. Murfreesboro Fem. Inst., Murfreesboro, Tenn. (26).
- Seaman, Ezra C., Ann Arbor, Mich. (20).
- Seeley, Charles A., 26 Pine St., New York (18).
- Seymour, Prof. William P., 105 Third St., Troy, N. Y. (19).
- Sharp, Prof. Solomon Z., Maryville, Tenn. (26).
- Sheafer, P. W., Pottsville, Pa. (4).
- Sheafer, Walter S., Pottsville, Pa. (25).
- Sheldon, Edwin H., Chicago, Ill. (17).
- Shepherd, F. A., 21 North Vine Street, Nashville, Tenn. (26).
- Shumard, Mrs. Elizabeth M., Shelbyville, Bedford Co., Tenn. (26).
- Sill, J. M. B., Zoölogist, Detroit, Mich. (23).
- Simonds, Frederic W., Prof. of Nat. History, Univ. of N. Carolina, Chapel Hill, N. C. (25).
- Skinner, Joseph J., New Haven, Conn. (23).
- Smith, Carlos G., Pres. University of Alabama, Tuscaloosa, Ala. (26).
- Smith, Prof. F. H., University of Virginia, Charlottesville, Va. (26).
- Smith, Henry L., P. O. Box 2056, New York (26).
- Smith, Mrs. Henry L., P. O. Box 2056, New York (26).

- Smith, Henry T., Buffalo, N. Y. (25).
Smith, Herbert W., Academy of Sciences, St. Paul, Minn. (26).
Smith, J. W., M.D., Charles City, Iowa (21).
Smith, Quintus C., M. D., Cloverdale, Sonoma Co., Cal. (26).
Smith, Robert D., Pres. Columbia Athenæum, Columbia, Tenn. (26).
Smith, Mrs. S. H., Jersey City, N. J. (25).
Smith, Mrs. Sarah J., Louisville, Ky. (26).
Smith, William Austin, M. D., Columbia, Tenn. (26).
Smith, W. H., 209 Jefferson Avenue, Detroit, Mich. (24).
Smith, Prof. William H., Nashville, Tenn. (26).
Smock, Prof. John Conover, Rutgers' Coll., New Brunswick, N. J. (23).
Snively, Prof. John H., Nashville, Tenn. (26).
Snyder, Prof. Monroe B. (24).
Southworth, Mase S., Ph.D., Williamstown, Mass. (25).
Sprague, E. C., Buffalo, N. Y. (24).
Springer, Alfred, Cincinnati, Ohio (24).
Stearns, Eben S., Chancellor Univ. of Nashville, Nashville, Tenn. (26).
Stearns, Winfrid Alden, Amherst, Mass. (23).
Sternberg, George M., Surgeon U.S.A., Post Surgeon, Fort Walla Walla, W. T. (24).
Stevens, R. P., Jamaica, N. Y. (18).
Stevens, Thaddeus M., M.D., Indianapolis, Ind. (20).
Stewart, Prof. Elliott W., Lake View, Erie Co., N. Y. (25).
Stimpson, Thomas M., Peabody, Mass. (18).
Stone, Miss Mary H., Salem, Mass. (25).
Storer, Dr. D. H., Boston, Mass. (1).
Storer, Prof. Frank H., Jamaica Plain, Mass. (13).
Stowell, John, 48 Main Street, Charlestown, Mass. (21).
Straight, Prof. H. H., Oswego, N. Y. (25).
Strong, Prof. Edwin A., Grand Rapids, Mich. (24).
Stubbs, Prof. Wm. C., Alabama Agricultural and Mechanical College, Auburn, Lee Co., Ala. (25).
Summers, Thos. O., M. D., Vanderbilt Univ., Nashville, Tenn. (22).
Sutton, Dr. George, Aurora, Dearborn Co., Ind. (20).
Swain, Mrs. James, Fort Dodge, Iowa (21).
Swasey, Oscar F., M.D., Beverly, Mass. (17).

Taylor, Wm. Curtis, 914 Chestnut St., Philadelphia, Pa. (24).
Thompson, Harvey M., Brevoort House, Chicago, Ill. (17).
Thompson, Robert H., 24 First St., Troy, N. Y. (19).
Thomson, Prof. A., Ames, Iowa (21).
Thruston, Gates P., Cor. Sec. Tenn. Hist. Society, Nashville, Tenn. (26).
Thurber, Miss Elizabeth, Plymouth, Mass. (22).
Tice, John H., St. Louis, Mo. (24).
Tittmann, Otto H., U. S. Coast Survey, Washington, D. C. (24).

- Todd, Prof. James E., Tabor, Fremont Co., Iowa (22).
Tomlinson, Dr. J. M., 28 East Ohio St., Indianapolis, Ind. (20).
Toney, Rev. Thomas, Nashville, Tenn. (26).
Toombs, Robert, M. D., Washington, Ga. (26).
Townsend, Franklin, Adj. Gen. State of N. Y., Albany, N. Y. (4).
Townshend, Prof. N. S., Columbus, Ohio (17).
Trembley, J. B., M.D., Oakland, Alameda Co., Cal. (17).
Trowbridge, Mrs. L. H., 211 Jefferson Ave., Detroit, Mich. (21).
Tutwiler, Henry, Greene Springs, Ala. (26).
Twiss, George H., Columbus, Ohio (24).

Underwood, Rev. Walter, D. D., Fairfax, Vt. (26).
Upham, Dr. J. Baxter, 31 Chestnut St., Boston, Mass. (14).
Upham, Warren, Nashua, N. H. (25).

Vail, Prof. Hugh D., 1927 Mt. Vernon St., Philadelphia, Pa. (18).
Vasey, George, Department of Agriculture, Washington, D. C. (20).
Vaughn, Prof. William J., Franklin, Tenn. (26).

Wakeman, Thaddeus B., 93 Nassau St., New York (25).
Walcott, Charles D., Geological Rooms, Albany, N. Y. (25).
Walker, George C., 13 Chamber of Commerce, Chicago, Ill. (17).
Walker, N. B., 19 and 21 Cliff St., New York (20).
Wanzer, Ira, Brookfield, Conn. (18).
Ward, Lester F., Treasury Department, Washington, D. C. (26).
Ward, W. E., D.D., President Ward's Seminary for Young Ladies, Nashville, Tenn. (26).
Warder, Robert B., North Bend, Hamilton Co., Ohio (19).
Wardwell, George J., Rutland, Vt. (20).
Warner, Mrs. J. D., 199 Baltic St., Brooklyn, N. Y. (21).
Warren, G. Washington, 54 Devonshire St., Room 1, Boston, Mass. (18).
Warring, Charles B., Croton Landing, N. Y. (25).
Watkins, Samuel, President Board of Education, Nashville, Tenn. (26).
Wead, Prof. Charles K., Malone, N. Y. (23).
Weakley, Richard W., Supt. Public Schools, Nashville, Tenn. (26).
Webb, Benjamin, jr., Salem, Mass. (18).
Webster, Prof. H. E., Union College, Schenectady, N. Y. (23).
Welch, Mrs. G. O., Lynn, Mass. (21).
Wells, George A., Troy, N. Y. (19).
Wells, Samuel, 31 Pemberton Square, Boston, Mass. (24).
Wendell, Emory, First National Bank, Detroit, Mich. (24).
West, Charles E., 138 Montague St., Brooklyn, N. Y. (1).
Wharton, Prof. John C., Tenn. College of Pharmacy, Nashville, Tenn. (26).
Wheeler, Prof. C. G., University of Chicago, Chicago, Ill. (18).
Wheeler, Lt. Geo. M., U.S.E., Lock Box 93, Washington, D. C. (25).
Wheeler, Orlando B., Ass't U. S. Lake Survey, Detroit, Mich. (24).

- Wheeler, Dr. T. B., 714 Craig St., Montreal, Canada (11).
White, Lieut. Com'd H. C., U. S. Navy, care W. I. Harris, Continental National Bank, New York (23).
White, Prof. I. C., University of W. Va., Morgantown, W. Va. (25).
White, John, Buffalo, N. Y. (25).
White, LeRoy S., Waterbury, Conn. (23).
White, Samuel S., Publisher Dental Cosmos, Chestnut St., cor. Twelfth, Philadelphia, Pa. (23).
White, Z. L., Washington, D. C. (26).
Whitney, Mary W., Waltham, Mass. (19).
Whitworth, John L., Nashville, Tenn. (26).
Wilder, Gen. John T., Chattanooga, Tenn. (26).
Wilkin Daniel F., Nashville Tenn. (26).
Willet, Prof. Joseph E., Mercer University, Macon, Ga. (25).
Williams, Charles H., Buffalo, N. Y. (25).
Williams, E. B., Strawberry Point, Iowa (24).
Williams, Edward H., jr., P. O. Box 271, Wilkes Barre, Pa. (25).
Williams, Frank, Buffalo, N. Y. (25).
Williams, H. S., Williams Brothers, Phenix Iron Works, Ithaca, N. Y. (18).
Williams, J. G., 224 South 11th St., Philadelphia, Pa. (19).
Williams, John T., Rafferty and Williams, Foot 44th St., East R., N. Y. (25).
Williams, P. O., M.D., Watertown, Jefferson Co., N. Y. (24).
Williams, Willoughby, Nashville, Tenn. (26).
Williamson, Lieut. Col. R. S., U. S. Engineers, Light House Engineer, San Francisco, Cal. (12).
Wills, A. W., corner Union and Cherry streets, Nashville, Tenn. (26).
Wilson, M. C., Russellville, Ala. (26).
Wilson, Walter T., Buffalo, N. Y. (25).
Wormley, Theodore G., University of Penn., Philadelphia, Pa. (20).
Worster, Joseph, M.D., 115 East Thirtieth St., New York (22).
Wright, Prof. Albert A., Oberlin College, Oberlin, Ohio (24).
Wright, Rev. William J., Carlisle, Pa. (25).
Wurtz, Henry, 12 Hudson Terrace, Hoboken, N. J. (10).
- Yarnall, Prof. M., U. S. Navy, Washington, D. C. (26).
Yeatman, Prof. Joseph W., Nashville, Tenn. (26).
Young, William H., Bookseller, 8 and 9 First St., Troy, N. Y. (19).
- Zalinski, Lieut. E. L., U. S. A., St. Augustine, Fla. (25).

[599 MEMBERS.]

NOTE.—The omission of an address in the foregoing list, indicates that letters directed to that last printed were returned as uncalled for. Information of the present address of the members so indicated is requested by the PERMANENT SECRETARY.

FELLOWS.

- Abbe, Prof. Cleveland, Washington, D. C. (16).
 Agassiz, Alexander, Curator Mus. Comp. Zoology, Cambridge, Mass. (18).
 Alexander, John S., 1935 Arch St., Philadelphia, Pa. (20).
 Allen, Joel A., Museum Comparative Zoology, Cambridge, Mass. (18).
 Allen, Zachariah, Providence, R. I. (1).
 Alvord, Benj., Paymaster General, U. S. Army, Washington, D. C. (17).
 Andrews, Prof. E. B., Lancaster, Ohio (7).
 Appleton, Prof. John H., Brown University, Providence, R. I. (22).
 Austin, E. P., Cambridge, Mass. (18).
- Bailey, Prof. Loring W., University of Fredericton, N. B. (18).
 Bailey, W. W., 31 Market Square, Providence, R. I. (18).
 Baird, Prof. S. F., Sec'y Smithsonian Institution, Washington, D. C. (1).
 Bardwell, Prof. F. W., University of Kansas, Lawrence, Kan. (13).
 Barker, Prof. G. F., University of Pennsylvania, Philadelphia, Pa. (13).
 Barnard, F. A. P., President Columbia College, New York (7).
 Barnard, Gen. J. G., U. S. Army, Army Building, New York (14).
 Bassett, Homer F., Waterbury, Conn. (23).
 Batchelder, Dr. J. H., Salem, Mass. (18).
 Batchelder, John M., 3 Divinity Avenue, Cambridge, Mass. (8).
 Bell, Samuel N., Manchester, N. H. (7).
 Bethune, Rev. Chas. J. S., Trinity Coll. School, Port Hope, Canada (18).
 Blackie, Geo. S., M. D., Nashville, Tenn. (26).
 Blake, Clarence J., M. D., Hotel Berkeley, Boston, Mass. (24).
 Blake, Eli W., New Haven, Conn. (1).
 Blake, Prof. Eli W., jr., Providence, R. I. (15).
 Blake, Francis, jr., Assistant U. S. Coast Survey, Newton Lower Falls, Mass. (23).
 Bolton, Dr. H. Carrington, Trinity College, Hartford, Conn. (17).
 Bouvé, Thomas T., Pres't Boston Soc. Nat. History, Boston, Mass. (1).
 Bowditch, Henry I., M.D., 113 Boylston St., Boston, Mass. (2).
 Brackett, Prof. C. F., College of New Jersey, Princeton, N. J. (19).
 Brewer, Prof. Wm. H., Box 55, New Haven, Conn. (20).
 Brocklesby, Prof. John, Trinity College, Hartford, Conn. (23).
 Brooks, William K., Johns Hopkins University, Baltimore, Md. (23).
 Bross, Hon. Wm., Chicago, Ill. (7).
 Broun, Prof. W. LeRoy, Vanderbilt University, Nashville, Tenn. (25).
 Brown, Robert, jr., Office Cincinnati Gas Light Co., Cincinnati, Ohio (11).
 Brown, Mrs. Robert, jr., Cincinnati, Ohio (17).
 Brush, Prof. George J., Yale College, New Haven, Conn. (4).
 Burbank, L. S., Woburn, Mass. (18).
 Burgess, Edward, Sec. Natural History Society, Boston, Mass. (22).
 Burnham, S. W., 52 Vincennes Ave., Chicago, Ill. (25).
 Bushee, Prof. James, Worcester, Mass. (9).

- Caldwell, Prof. George C., Cornell University, Ithaca, N. Y. (23).
 Carmichael, Prof. Henry, Bowdoin College, Brunswick, Me. (21).
 Carpenter, Lieut. W. L., Dunkirk, N. Y. (24).
 Carr, Lucien, Peabody Museum Arch. and Ethn., Cambridge, Mass. (25).
 Carrier, Prof. Joseph C., President St. Mary's College, Galveston, Tex. (20).
 Chadbourne, Prof. P. A., Pres't Williams Coll., Williamstown, Mass. (10).
 Chamberlin, T. C., Beloit College, Beloit, Wis. (21).
 Chandler, Prof. C. F., School of Mines, Columbia Coll., New York (19).
 Chandler, Prof. W. H., The Lehigh University, Bethlehem, Pa. (19).
 Chanute, O., care Erie Railway, New York (17).
 Chesbrough, E. S., Chicago, Ill. (2).
 Chickering, Prof. J. W., jr., Deaf Mute College, Washington, D. C. (22).
 Clark, Prof. John E., Mathematics, Yale College, New Haven, Conn. (17).
 Clarke, Prof. F. W., Cincinnati University, Cincinnati, Ohio (18).
 Coffin, Prof. John H. C., U. S. Navy, Washington, D. C. (1).
 Coffin, Selden J., Ph.D. Lafayette College, Easton, Pa. (22).
 Collett, John, Prof. Indiana Survey, Newport, Ind. (17).
 Comstock, Prof. M. L., Galesburg, Knox Co., Ill. (21).
 Comstock, Theo. B., Ass't Prof. in charge of Geol. Dep't, Cornell University, Ithaca, N. Y. (24).
 Cook, Prof. George H., Lock Box 5, New Brunswick, N. J. (18).
 Cope, Prof. Edward D., 2100 Pine St., Philadelphia, Pa. (17).
 Coues, Elliott, Surgeon U. S. Army, Smithsonian Institution, Washington, D. C. (25).
 Cox, Prof. Edward T., State Geologist, Indianapolis, Ind. (19).
 Craik, Robert, M.D., McGill University, Montreal, Canada (11).
 Cramp, Rev. J. M., D.D., Wolfville, N. S. (11).
 Crocker, Charles F., Lawrence, Mass. (22).
 Crocker, Susan E., M.D., Lawrence, Mass. (21).
 Cummings, Rev. Joseph, D.D., President Wesleyan University, Middletown, Conn. (13).
 Curtis, Dr. Josiah, Ebbitt House, Washington, D. C. (18).
 Cutting, Hiram A., M.D., State Geologist, Lunenburg, Vt. (17).
 Dall, Mrs. Caroline H., 141 Warren Avenue, Boston, Mass. (18).
 Dall, Wm. H., care Smithsonian Institution, Washington, D. C. (18).
 Dalrymple, Rev. Dr. E. A., Baltimore, Md. (11).
 Dana, Edward Salisbury, New Haven, Conn. (23).
 Dana, Prof. James D., New Haven, Conn. (1).
 Danforth, Edward, Dep't of Public Instruction, Elmira, N. Y. (11).
 Dawson, Dr. J. W., Principal McGill College, Montreal, Canada (10).
 Day, F. H., M.D., Wauwatosa, Wis. (20).
 Dean, George W., U. S. Coast Survey, Fall River, Mass. (15).
 Dimmock, George, 19 Baldwin St., Cambridge, Mass. (22).
 Dinwiddie, Robert, 113 Water St., New York (1).
 Dodge, Charles R., Washington, D. C. (22).

Dutton, Capt. Clarence E., U. S. Ordnance Dep't, Washington, D. C. (23).
 Dwyer, John, M. D., Hartford, Conn. (23).

Eaton, Prof. D. G., Packer Institute, Brooklyn, N. Y. (19).
 Eddy, Prof. H. T., University of Cincinnati, Cincinnati, Ohio (24).
 Eimbeck, Wm., U.S.C.S., Washington, D. C. (17).
 Elliott, Ezekiel B., Statistical Bureau, Washington, D. C. (10).
 Elsberg, Louis, M.D., 614 Fifth Avenue, New York (23).
 Emerson, Prof. Benjamin K., Amherst, Mass. (19).
 Emerson, Prof. C. F., Dartmouth College, Hanover, N. H. (22).
 Emerson, George B., LL.D., 3 Pemberton Square, Boston, Mass. (1).
 Emerton, James H., Salem, Mass. (18).
 Engelmann, Dr. George, St. Louis, Mo. (1).
 Ernst, Rev. Carl W., P. O. Box 671, Providence, R. I. (23).
 Eustis, Prof. Henry L., Cambridge, Mass. (2).
 Evans, Asher B., Principal Union School, Lockport, N. Y. (19).

Fairbanks, Rev. Henry, St. Johnsbury, Vt. (14).
 Farlow, Dr. W. G., 6 Park Square, Boston, Mass. (20).
 Farmer, Moses G., Torpedo Station, Newport, R. I. (9).
 Ferrel, William, U. S. Coast Survey Office, Washington, D. C. (11).
 Fitch, Edmund H., Secretary Toledo Soc. Nat. Sciences, Toledo, O. (23).
 Fitch, Edward H., Ashtabula, Ohio (11).
 Fitch, O. H., Ashtabula, Ohio (7).
 Fontaine, Prof. Wm. M., Univ. of W. Va., Morgantown, W. Va. (25).
 Foote, Dr. A. E., 1223 Belmont Avenue, Philadelphia, Pa. (21).
 Freeman, H. C., Alto Pass, Union Co., Ill. (17).

Gardiner, Rev. Frederic, D.D., Middletown, Conn. (23).
 Garland, Landon C., Chancellor Vanderbilt Univ., Nashville, Tenn. (25).
 Garman, S. W., Museum Comp. Zoology, Cambridge, Mass. (20).
 Genth, Prof. F. A., University of Pennsylvania, Philadelphia, Pa. (24).
 Gilbert, G. K., P. O. Box 806, Washington, D. C. (18).
 Gill, Prof. Theodore, Smithsonian Institution, Washington, D. C. (17).
 Gillman, Henry, Waldo, Alachua Co., Fla. (24).
 Gilman, Daniel C., President of the Johns Hopkins University, Baltimore, Md. (10).
 Gleason, F. L., Manufacturer Iron and Steel, Middletown, Conn. (23).
 Goessman, Prof. C. A., Mass Agricultural College, Amherst, Mass. (18).
 Goode, Prof. George Brown, Middletown, Conn. (22).
 Grant, Mrs. Mary J., Brookfield, Conn. (23).
 Gray, Prof. Asa, Botanic Gardens, Cambridge, Mass. (1).
 Green, Dr. Traill, Easton, Pa. (1).
 Grimes, J. Stanley, 165 Mason St., Milwaukee, Wis. (17).

- Grinnan, A. G., Orange Court House, Va. (7).
Grote, Aug. R., Director of the Museum Buffalo Society Natural Sciences,
• Buffalo, N. Y. (22).
Guyot, Prof. Arnold, Princeton, N. J. (1).
- Hadley, George, 1355 Main St., Buffalo, N. Y. (6).
Hagen, Dr. Hermann A., Museum Comp. Zoology, Cambridge, Mass. (17).
Haldeman, Prof. S. S., Chickies, Pa. (1).
Hale, Dr. William H., Albany, N. Y. (19).
Hall, Prof. Asaph, U. S. Naval Observatory, Washington, D. C. (25).
Hall, Prof. James, Albany, N. Y. (1).
Hambly, John B., Portsmouth, R. I. (18).
Hamlin, Dr. A. C., Bangor, Me. (10).
Harrington, Prof. Mark W., Ann Arbor, Mich. (22).
Harrison, Dr. B. F. Wallingford, Conn. (11).
Hasbrouck, Prof. Isaac E., Rutgers' College, New Brunswick, N. J. (23).
Haskins, Rev. David Greene, Cambridge, Mass. (25).
Hawes, George W., New Haven, Conn. (23).
Hawkins, Dr. B. Waterhouse, Geological Museum, New Jersey College,
Princeton, N. J. (17).
Hawley, C. T., 2400 Spring Avenue, Milwaukee, Wis. (20).
Hedrick, B. S., Examiner U. S. Patent Office, Washington, D. C. (19).
Henshaw, Henry W., Office U. S. Engineers, Lock Box 93, Washington,
D. C. (24).
Herrick, Mrs. Sophie B., Baltimore, Md. (23).
Hilgard, Prof. Eugene W., University of California, Berkeley, Cal. (11).
Hilgard, Prof. Julius E., U. S. Coast Survey, Washington, D. C. (4).
Hill, George W., Mathematician, Nyack Turnpike, N. Y. (23).
Hill, Rev. Dr. Thomas, 68 Deering St., Portland, Me. (3).
Hinrichs, Prof. Gustavus, State University, Iowa City, Iowa (17).
Hitchcock, Prof. Charles H., Hanover, N. H. (11).
Holden, Prof. Edward S., Naval Observatory, Washington, D. C. (23).
Horsford, Prof. E. N., Cambridge, Mass. (1).
Hosford, Charles E., Terre Haute, Ind. (20).
Hough, Franklin B., Lowville, N. Y. (4).
Hough, G. W. (15).
Hoy, Philo R., M.D., Racine, Wis. (17).
Hunt, George, Providence, R. I. (9).
Hunt, Dr. T. Sterry, St. James Hotel, Boston, Mass. (1).
Huntington, Prof. J. H., Hanover, N. H. (19).
Hyatt, Prof. Alpheus, Natural History Society, Boston, Mass. (18).
Hyatt, James, Stanfordville, Dutchess Co., N. Y. (10).
- Jenks, Elisha T., Middleborough, Mass. (22).
Jenks, Prof. J. W. P., Middleborough, Mass. (2).

Johnson, Prof. S. W., Sheffield Scientific School, New Haven, Conn. (22).
Johnston, Prof. John, Middletown, Conn. (1).
Julien, Alexis A., School of Mines, Columbia College, New York (24).

Kellogg, Justin, 259 River St., Troy, N. Y. (19).
Kerr, Prof. W. C., Raleigh, N. C. (10).
King, Robert, M. D., Kalamazoo, Mich. (21).
Kirkwood, Prof. Daniel, Bloomington, Ind. (7).

Lambert, Rev. Thomas R., D.D., Charlestown, Mass. (18).
Lambert, Dr. T. S., 449 West 21st St., New York (21).
Langley, Prof. John W., University of Michigan, Ann Arbor, Mich. (23)
Langley, Prof. S. P., Director of Observatory, Allegheny, Pa. (18).
Lattimore, Prof. S. A., University of Rochester, Rochester, N. Y. (15).
Lawrence, George N., 172 Pearl St., New York (7).
Laws, Samuel S., Columbia, Mo. (23).
Lea, Dr. Isaac, 1622 Locust St., Philadelphia, Pa. (1).
LeConte, Dr. John L., 1625 Spruce St., Philadelphia, Pa. (1).
Leeds, Prof. Albert R., Stevens Institute, Hoboken, N. J. (23).
Leonard, N. R., State University, Iowa City, Iowa (21).
Lesley, Prof. J. Peter, State Geol. of Pa., 1008 Clinton St., Phil., Pa. (2).
Levette, Gilbert M., Geologist, Indianapolis, Ind. (23).
Lindsley, Dr. J. B., Nashville, Tenn. (1).
Lintner, J. A., N. Y. State Museum of Nat. Hist., Albany, N. Y. (22).
Little, Prof. George, State Geologist of Georgia, Atlanta, Ga. (15).
Little, W. C., Albany, N. Y. (22).
Lockwood, Rev. Samuel, Freehold, N. J. (18).
Loomis, Prof. Elias, New Haven, Conn. (1).
Loughridge, Prof. R. H., Ass't State Geologist, Atlanta, Ga. (21).
Lovering, Prof. Joseph, Cambridge, Mass. (2).
Lupton, Prof. N. T., Vanderbilt University, Nashville, Tenn. (17).
Lyman, Prof. Chester S., New Haven, Conn. (4).
Lyman, Col. Theodore, Brookline, Mass. (23).
Lyon, Dr. Henry, 34 Monument Sq., Charlestown, Mass. (18).

Mallet, Prof. J. W., University of Virginia, Va. (25).
Malone, David R., M.D., Edinburg, Ind. (20).
Mann, B. Pickman, 19 Follen St., Cambridge, Mass. (22).
Marcy, Prof. Oliver, Evanston, Ill. (10).
Marsh, Prof. O. C., Yale College, New Haven, Conn. (15).
Mason, Otis T., Columbian University, Washington, D. C. (25).
Mayer, Prof. Alfred M., Stevens Inst. Technology, Hoboken, N. J. (19).
McClintock, Frank, West Union, Iowa (22).
McMurtrie, William, Dep't Agriculture, Washington, D. C. (22).

- McRae, Hamilton S., Sup't of Schools, Muncie, Ind. (20).
 Means, Rev. A., Oxford, Ga. (5).
 Meehan, Thomas, Germantown, Pa. (17).
 Mees, Carl Leo, Louisville, Ky. (24).
 Meigs, Dr. James Aitken, 1408 Spruce St., Philadelphia, Pa. (12).
 Mendenhall, Prof. T. C., Agric. and Mechanical Coll., Columbus, Ohio (20).
 Mitchell, Miss Maria, Vassar College, Poughkeepsie, N. Y. (4).
 Moore, Prof. James W., M. D., Lafayette College, Easton, Pa. (22).
 Morgan, Hon. L. H., Rochester, N. Y. (10).
 Morley, Prof. Edward W., Hudson, Ohio (18).
 Morris, Rev. John G., Baltimore, Md. (12).
 Morse, Prof. Edward S., Imperial Univ. of Tokio, Tokio, Japan. (18).
 Morton, Henry, Stevens Institute Technology, Hoboken, N. J. (18).
 Munroe, Prof. Chas. E., U. S. Naval Academy, Annapolis, Md. (22).
- Nason, Prof. H. B., Rensselaer Polytechnic Inst., Troy, N. Y. (13).
 Nelson, Prof. Edward T., Delaware, Delaware Co., O. (24).
 Newberry, Prof. J. S., Cleveland, Ohio, and Columbia Coll., New York (5).
 Newcomb, Prof. Simon, U. S. Naval Observatory, Washington, D. C. (13).
 Newton, Hubert A., New Haven, Conn. (6).
 Nichols, Prof. W. R., Mass. Inst. Technology, Boston, Mass. (18).
 Niles, Prof. W. H., Cambridge, Mass. (16).
 Nipher, Prof. F. E., Washington University, St. Louis, Mo. (24).
 Norton, Prof. W. A., New Haven, Conn. (6).
- Oliver, Prof. James E., Cornell University, Ithaca, N. Y. (7).
 Oliver, Miss Mary E., Cascadilla Hotel, Ithaca, N. Y. (20).
 Orton, Prof. Edward, President Ohio Agricultural and Mechanical College,
 Columbus, Ohio (19).
 Osborne, John W., 212 Delaware Ave., N. E., Washington, D. C. (22).
 Owen, Dr. Richard, Indiana State University, Bloomington, Ind. (20).
- Paine, Cyrus F., Rochester, N. Y. (12).
 Paine, Nathaniel, Worcester, Mass. (18).
 Palfray, Hon. Charles W., Salem, Mass. (21).
 Parkhurst, Henry M., Law Stenographer, 33 Park Row, New York (23).
 Parry, Dr. Charles C., Davenport, Iowa (6).
 Peckham, S. F., University of Minnesota, Minneapolis, Minn. (18).
 Pedrick, Wm. R., Lawrence, Mass. (22).
 Peirce, B. O., 413 Broadway, Cambridge, Mass. (18).
 Perkins, Maurice, Schenectady, N. Y. (15).
 Pettee, Prof. William H., Ann Arbor, Mich. (24).
 Phippen, Geo. D., Salem, Mass. (18).
 Pickering, Prof. Edw. C., Director of Observatory, Cambridge, Mass. (18).

Pourtales, L. F., Keeper Museum Comp. Zoology, Cambridge, Mass. (1).
 Powell, Major J. W., 910 M St., Washington, D. C. (23).
 Prescott, Prof. Albert B., Ann Arbor, Mich. (23).
 Prime, Prof. Frederick, jr., Lafayette College, Easton, Pa. (24).
 Pumpelly, Prof. Raphael, Owego, Tioga County, N. Y. (17).
 Putnam, F. W., Curator Peabody Museum Archæology and Ethnology,
 Cambridge, Mass. Address as Permanent Secretary A. A. A. S.,
 Salem, Mass. (10).
 Pynchon, Rev. Thomas R., Pres't of Trinity College, Hartford, Conn. (23).

Quimby, Prof. E. T., Hanover, N. H. (22).
 Quincy, Edmund, 85 Clinton St., Boston, Mass. (11).

Raymond, Rossiter W., 17 Burling Slip, New York (15).
 Redfield, John H., care A. Whitney and Sons, Philadelphia, Pa. (1).
 Remsen, Prof. Ira, 11 Cathedral St., Baltimore, Md. (22).
 Rice, Prof. Wm. North, Middletown, Conn. (18).
 Richards, Prof. Robert H., Mass. Inst. Tech., Boston, Mass. (22).
 Riley, Prof. C. V., U. S. Entomologist, Washington, D. C. (17).
 Ritchie, E. S., 150 Tremont St., Boston, Mass. (10).
 Rockwell, Joseph P., Creston, Iowa (17).
 Rockwood, Prof. Charles G., jr., Princeton, N. J. (20).
 Roepper, Charles W., Bethlehem, Pa. (23).
 Rogers, Fairman, 202 West Rittenhouse Square, Philadelphia, Pa. (11).
 Rogers, Prof. Robert E., University of Penn., Philadelphia, Pa. (18).
 Rogers, W. A., Ass't Harvard Coll. Observatory, Cambridge, Mass. (15).
 Rogers, Prof. William B., 117 Marlborough St., Boston, Mass. (1).
 Rood, Prof. O. N., New York (14).
 Roosevelt, Clinton, 11 Wall St., New York (11).
 Runkle, Prof. J. D., President Institute of Technology, Boston, Mass. (2).
 Rutherford, Lewis M., 175 Second Ave., New York (13).

Sadtler, Prof. Samuel P., University of Penn., Philadelphia, Pa. (22).
 Safford, Dr. James M., Nashville, Tenn. (6).
 Saunders, William, London, Ontario, Canada (17).
 Saville, Dr. John J., Sioux City, Iowa (22).
 Schott, Charles A., Coast Survey Office, Washington, D. C. (8).
 Schweitzer, Prof. Paul, State University of Mo., Columbia, Mo. (24).
 Scudder, Samuel H., Cambridge, Mass. (13).
 Seaman, Wm. H., Microscopist, Agric. Dep't, Washington, D. C. (23).
 Shaler, Prof. N. S., Cambridge, Mass. (19).
 Sias, Solomon, M.D., Schoharie, Schoharie Co., N. Y. (10).
 Sill, Hon. Elisha N., Cuyahoga Falls, Ohio (6).
 Silliman, Prof. Benjamin, Yale College, New Haven, Conn. (1).
 Silliman, Prof. Justus M., Lafayette College, Easton, Pa. (19).

- Smith, Prof. Eugene A., University of Alabama, Tuscaloosa, Ala. (20).
Smith, Dr. J. Lawrence, Louisville, Ky. (1).
Smith, Prof. S. I., Yale College, New Haven, Conn. (18).
Spencer, John W., Teacher and Geologist, Paxton, Sullivan Co., Ind. (20).
Stanard, Benjamin A., Cleveland, Ohio (6).
Stearns, Henry P., M.D., Hartford, Conn. (23).
Stearns, R. E. C., P. O. Box 13, Berkeley, Cal. (18).
Steiner, Dr. Lewis H., Frederick City, Md. (7).
Stephens, W. Hudson, Lowville, N. Y. (18). Life Member.
Stockwell, John N., 579 Case Avenue, Cleveland, Ohio (18).
Stone, Mrs. Leander, 1571 Indiana Avenue, Chicago, Ill. (22).
Stone, Ormond, Director Cincinnati Observatory, Univ. of Cincinnati,
Mt. Lookout, Ohio (24).
Storrs, Henry E., Jacksonville, Ill. (20).
Stuart, Prof. A. P. S., Lincoln, Nebraska. (21).
Swallow, Prof. G. C., Columbia, Mo. (10).
- Tappan, Prof. Eli T., Kenyon College, Gambier, Ohio (20).
Terry, Prof. Nathaniel M., U. S. Naval Academy, Annapolis, Md. (23).
Thompson, A. Remsen, 50 West 51st Street, New York (1).
Thurston, Prof. Robert H., Stevens Institute, Hoboken, N. J. (23).
Toner, Joseph M., M.D., 615 Louisiana Ave., Washington, D. C. (23).
Trowbridge, Prof. John, Cambridge, Mass. (25).
Trowbridge, Prof. W. P., New Haven, Conn. (10).
Turnbull, Laurence, M.D., 1208 Spruce St., Philadelphia, Pa. (10).
Tuttle, Prof. Albert H., Columbus, Ohio (17).
- Uhler, Philip R., Baltimore, Md. (19).
- Van der Weyde, Dr. P. H., P. O. Box 4379, New York (17).
Van Vleck, Prof. John M., Middletown, Conn. (23).
Vaux, William S., 1702 Arch St., Philadelphia, Pa. (1). Life Member.
Verrill, Prof. A. E., Yale College, New Haven, Conn. (16).
Vose, Prof. George L., Bowdoin College, Brunswick, Me. (15).
- Wadsworth, M. Edward, Assistant in Geology, Harvard University,
42 Langdon St., Cambridge, Mass. (23).
Walker, Prof. Joseph B., care Bank of Kentucky, Louisville, Ky. (20).
Walker, Prof. J. R., Napoleon Ave., cor. Coliseum St., New Orleans,
La. (19).
Waller, Elwyn, School of Mines, Columbia College, New York (23).
Walling, H. F., 102 Chauncy St., Boston, Mass. (16).
Ward, Prof. Henry A., Rochester, N. Y. (13).
Ward, Henry D. A., Meteorologist, Middletown, Conn. (23).

- Ward, Dr. R. H., 53 Fourth St., Troy, N. Y. (17).
 Warner, James D., 199 Baltic St., Brooklyn, N. Y. (18). Life Member.
 Warren, Gen. G. K., U.S.A., Engineer's Office, Newport, R. I. (12).
 Warren, Prof. S. Edward, Newton, Mass. (17).
 Watson, Sereno, Botanic Gardens, Cambridge, Mass. (22).
 Webster, Prof. Nathan B., Principal Webster Inst., Norfolk, Va. (7).
 Wells, Daniel H., Hartford, Conn. (18).
 Westcott, O. S., Racine, Wis. (21).
 Wheatland, Dr. Henry, President Essex Institute, Salem, Mass. (1).
 Wheatley, Charles M., Phoenixville, Pa. (1).
 Wheildon, W. W., Concord, Mass. (13).
 White, Prof. C. A., Le Droit Park, Washington, D. C. (17).
 Whitfield, R. P., 173 Elm St., Albany, N. Y. (18).
 Whitney, Solon F., Watertown, Mass. (20).
 Whittlesey, Col. Charles, Cleveland, Ohio (1).
 Wilber, G. M., Pine Plains, N. Y. (19).
 Wilbur, A. B., Port Jervis, Orange Co., N. Y. (23).
 Wilder, Prof. Burt G., Cornell University, Ithaca, N. Y. (22).
 Wiley, Prof. Harvey W., Purdue University, La Fayette, Ind. (21).
 Williams, Charles H., M.D., 15 Arlington St., Boston, Mass. (22).
 Williams, Prof. Henry W., 15 Arlington St., Boston, Mass. (11).
 Wilson, Prof. Daniel, 117 Bloor St., Toronto, Canada (25.)
 Winchell, Prof. Alex., Ann Arbor, Mich. (3).
 Winchell, Prof. N. H., University of Minnesota, Minneapolis, Minn. (19).
 Witter, F. M., Muscatine, Iowa (21).
 Worthen, A. H., Warsaw, Ill. (5).
 Wright, Prof. Arthur W., Yale College, New Haven, Conn. (14).
 Würtele, Rev. Louis C., Acton Vale, Province of Quebec, Canada East (11).
 Wyckoff, Wm. C., Tribune Office, New York (20).
 Wylie, Prof. Theophilus A., Indiana University, Bloomington, Ind. (20).

 Yarrow, Dr. H. C., care Army Medical Museum, Washington, D. C. (23).
 Youmans, Prof. Edward L., New York (6).
 Young, C. A., Prof. of Astronomy, College of New Jersey, Princeton,
 New Jersey (18.)

[355 FELLOWS.]

TOTAL NUMBER OF MEMBERS OF THE ASSOCIATION, 954.

DECEASED MEMBERS.

[Information respecting omissions in this list, and the date of birth and of decease of any of the former members, is requested by the Permanent Secretary.]

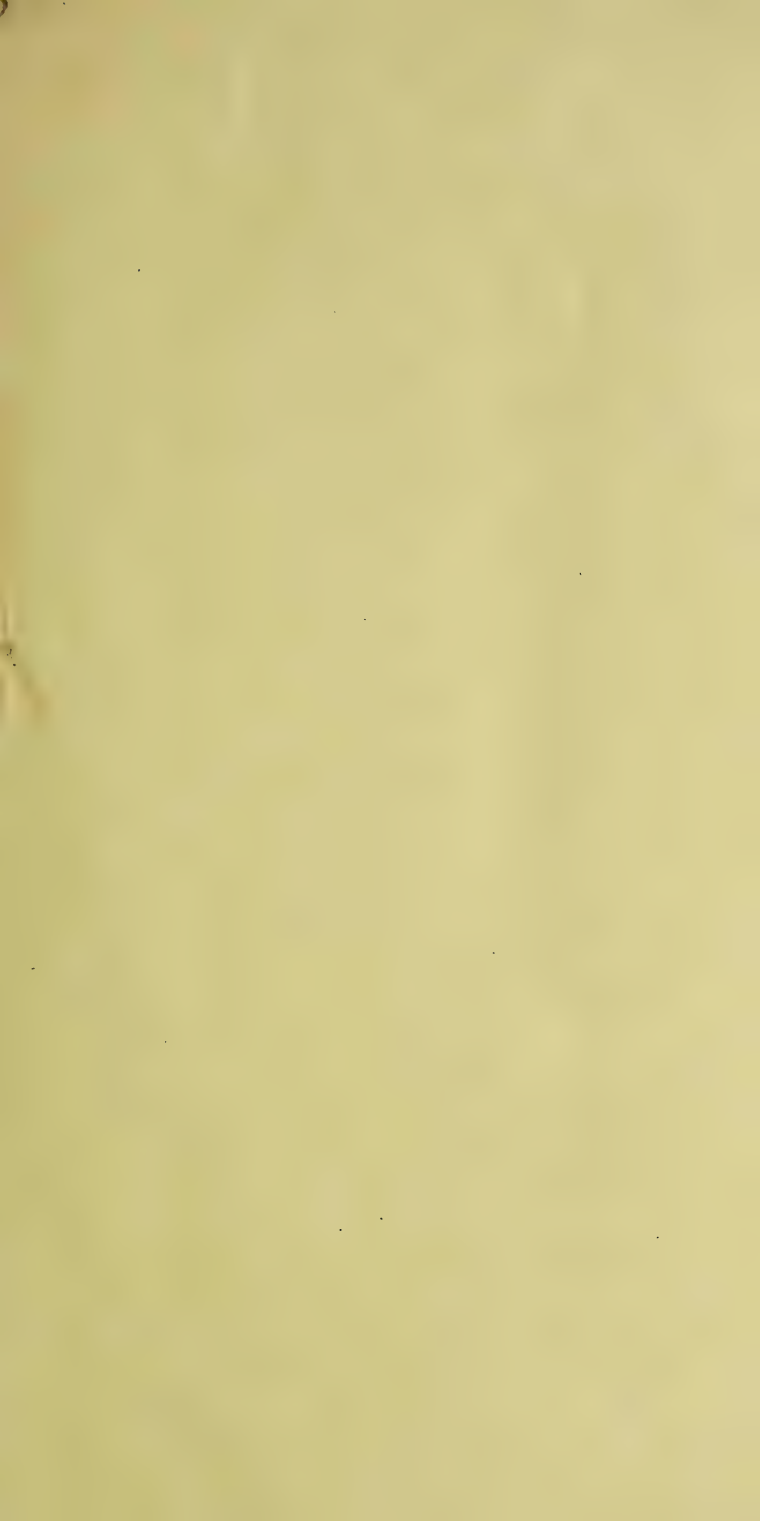
Abert, J. J., Washington, D. C. (1). Died in 1862.
Adams, C. B., Amherst, Mass. (1).
Adams, Edwin F., Charlestown, Mass. (18).
Adams, Samuel, Jacksonville, Ill. (18). Born in 1806. Died in 1877.
Agassiz, Louis, Cambridge, Mass. (1).
Ainsworth, J. G., Barry, Mass. (14).
Allston, R. F. W., Georgetown, S. C. (3). Died in 1864.
Anthony, Charles H., Albany, N. Y. (6). Died in 1874.
Ames, N. P., Springfield, Mass. (1).
Appleton, Nathan, Boston, Mass. (1).
Bache, Alexander D., Washington, D. C. (1).
Bache, Franklin, Philadelphia, Pa. (1).
Bailey, J. W., West Point, N. Y. (1).
Barrett, Moses, Milwaukee, Wis. (21). Died in 1873.
Beck, C. F., Philadelphia, Pa. (1).
Beck, Lewis C., New Brunswick, N. J. (1).
Beck, T. Romeyn, Albany, N. Y. (1).
Benedict, G. W., Burlington, Vt. (16).
Bicknell, Edwin, Boston, Mass. (18). Died in 1877.
Binney, Amos, Boston, Mass. (1).
Binney, John, Boston, Mass. (3).
Blanding, William, R. I. (1).
Blatchford, Thomas W., Troy, N. Y. (6).
Blatchley, Miss S. L., New Haven, Conn. (19).
Bomford, George, Washington, D. C. (1).
Bradley, Leverette, Jersey City, N. J. (15). Died in 1875.
Braithwaite, Jos., Chambly, C. W. (11).
Brown, Andrew, Natchez, Miss. (1).
Burnap, G. W., Baltimore, Md. (12).
Burnett, Waldo I., Boston, Mass. (1).
Butler, Thomas B., Norwalk, Conn. (10).
Carpenter, Thornton, Camden, S. C. (7).
Carpenter, William M., New Orleans, La. (1).
Case, William, Cleveland, Ohio (6).
Caswell, Alexis, Providence, R. I. (2).
Chapman, N., Philadelphia, Pa. (1).
Chase, S. Dartmouth, N. H. (2).
Chauvenet, William, St. Louis, Mo. (1).
Clapp, Asahel, New Albany, Ind. (1).
Clark, H. J., Cambridge, Mass. (13).
Clark, Joseph, Cincinnati, Ohio (5).
Clarke, A. B., Holyoke, Mass. (13).
Cleaveland, C. H., Cincinnati, Ohio (9).
Cleveland, A. B., Cambridge, Mass. (2).
Coffin, James H., Easton, Pa. (1).
Cole, Thomas, Salem, Mass. (1).
Coleman, Henry, Boston, Mass. (1).

- Conrad, Timothy Abbott, Philadelphia, Pa. (1). Born August, 1803.
Died August 8, 1877.
- Cooper, William, Hoboken, N. J. (9). Died in 1864.
- Corning, Eastus, Albany, N. Y. (6).
- Couper, J. Hamilton, Darien, Ga. (1).
- Crosby, Alpheus, Salem, Mass. (10).
- Crosby, Thomas R., Hanover, N. H. (18).
- Croswell, Edwin, Albany, N. Y. (6).
- Curry, W. F., Geneva, N. Y. (11).
- Dayton, Edwin A., Madrid, N. Y. (7).
- Dean, Amos, Albany, N. Y. (6).
- Dearborn, George H. A. S., Roxbury, Mass. (1).
- Dekay, James E., New York (1).
- DeLaski, John, Carver's Harbor, Me. (18).
- Dewey, Chester, Rochester, N. Y. (1).
- Dexter, G. M., Boston, Mass. (11).
- Dillingham, W. A. P., Augusta, Me. (17).
- Doggett, Wm. E., Chicago, Ill. (17). Died in 1876.
- Doolittle, L., Lenoxville, C. E. (11). Died in 1862.
- Ducatel, J. T., Baltimore, Md. (1).
- Duffield, George, Detroit, Mich. (10). Died in 1868.
- Dumont, A. H., Newport R. I. (14).
- Duncan, Lucius C., New Orleans, La. (10).
- Dunn, R. P., Providence, R. I. (14).
- Easton, Norman, Fall River, Mass. (14).
- Eaton, James H., Beloit, Wis. (17). Died in 1877.
- Ely, Charles Arthur, Elyria, Ohio (4).
- Emmons, Ebenezer, Williamstown, Mass. (1).
- Engstrom, A. B., Burlington, N. J. (1).
- Everett, Edward, Boston, Mass. (2).
- Ewing, Thomas, Lancaster, Ohio (5).
- Ferris, Isaac, New York (6).
- Feuchtwanger, Lewis, New York (11). Died in 1876.
- Fillmore, Millard, Buffalo, N. Y. (7).
- Fisher, Mark, Trenton, N. J. (10).
- Fitch, Alexander, Hartford, Conn. (1).
- Forbush, E. B., Buffalo, N. Y. (15).
- Force, Peter, Washington, D. C. (4).
- Foster, J. W., Hyde Park, Chicago, Ill. (1).
- Foucon, Felix, Madison, Wis. (18).
- Fowle, Wm. B., Boston, Mass. (1). Died in 1864.
- Fox, Charles, Grosse Ile, Mich. (7).
- Frazer, John F., Philadelphia, Pa. (1).
- French, J. W., West Point, N. Y. (11).
- Gavit, John E., New York (1).
- Gay, Martin, Boston, Mass. (1).
- Gibbon, J. H., Charlotte, N. C. (3).
- Gillespie, W. M., Schenectady, N. Y. (10).
- Gilmor, Robert, Baltimore, Md. (1).
- Gould, Augustus A., Boston, Mass. (11).
- Gould, B. A., Boston, Mass. (2).
- Graham, James D., Washington, D. C. (1).
- Gray, Alonzo, Brooklyn, N. Y. (13).
- Gray, James H., Springfield, Mass. (6).
- Greene, Benjamin D., Boston, Mass. (1).
- Greene, Everett W., Madison, N. J. (10). Died in 1864.
- Greene, Samuel, Woonsocket, R. I. (9). Died in 1868.
- Greer, James, Dayton, Ohio (20).
- Griffith, Robert E., Philadelphia, Pa. (1).

- Griswold, John A., Troy, N. Y. (19).
Guest, William E., Ogdensburg, N. Y. (6).
Hackley, Charles W., New York (4).
Hale, Enoch, Boston, Mass. (1).
Hance, Ebenezer, Fallsington P. O. Pa. (7). Died in 1876.
Hare, Robert, Philadelphia, Pa. (11).
Harlan, Joseph G., Haverford, Pa. (8).
Harlan, Richard, Philadelphia, Pa. (1).
Harris, Thaddeus W., Cambridge, Mass. (1).
Harrison, Jos., jr., Philadelphia, Pa. (12).
Hart, Simeon, Farmington, Conn. (1).
Hartt, Charles F., Ithaca N. Y. (18). Born in 1840. Died March 18, 1878.
Haven, Joseph, Chicago, Ill. (17). Died in 1874.
Hayden, H. H., Baltimore, Md. (1).
Hayward, James, Boston, Mass. (1).
Henry, Joseph, Washington, D. C. (1). Born Dec. 17, 1797. Died in 1878.
Hickox, S. V. R., Chicago, Ill. (17). Died in 1872.
Hilgard, Theo. C., St. Louis, Mo. (17).
Hincks, William, Toronto, C. W. (11).
Hitchcock, Edward, Amherst, Mass. (1).
Hodgson, W. B., Savannah, Ga. (10).
Holbrook, J. E., Charleston, S. C. (1).
Hopkins, Albert, Williamstown, Mass. (19).
Hopkins, James G., Ogdensburg, N. Y. (10). Died in 1860.
Hopkins, T. O., Williamsville, N. Y. (10). Died in 1866.
Hosford, Benj. F., Haverhill, Mass. (13). Died in 1864.
Horton, C. V. R., Chaumont, N. Y. (10). Died in 1862.
Horton, William, Craigville, N. Y. (1).
Houghton, Douglas, Detroit, Mich. (1).
Hovey, Edmund O., Crawfordsville, Ind. (20). Born in 1801. Died in 1877.
Howland, Theodore, Buffalo, N. Y. (15).
Hubbert, James, Richmond, Province of Quebec (16).
Hunt, E. B., Washington, D. C. (2).
Hunt, Freeman, New York (11).
Ives, Moses B., Providence, R. I. (9). Died in 1857.
Ives, Thomas P., Providence, R. I. (10).
Johnson, W. R., Washington, D. C. (1).
Jones, Catesby A. R., Washington, D. C. (8).
Keep, N. C., Boston, Mass. (13). Died in 1875.
Kennicott, Robert, West Northfield, Ill. (12).
King, Mitchell, Charleston, S. C. (3). Died in 1862.
Knickerbocker, Charles, Chicago, Ill. (17). Died in 1873.
Lacklan, R., Cincinnati, Ohio (11).
Lapham, Increase A., Milwaukee, Wis. (3). Died in 1875.
LaRoche, R., Philadelphia, Pa. (12).
Lasel, Edward, Williamstown, Mass. (1).
Lawford, Frederick, Montreal, Canada (11). Died in 1866.
Lederer, Baron von, Washington, D. C. (1).
Lieber, Oscar M., Columbia, S. C. (8).
Lincklaen, Ledyard, Cazenovia, N. Y. (1).
Linsley, James H., Stafford, Conn. (1).
Lockwood, Moses B., Providence, R. I. (9). Died in 1872.
Logan, William E., Montreal, Canada (1).
Loosey, Charles F., New York (12).
Lothrop, Joshua R., Buffalo, N. Y. (15).
Lyon, Sidney S., Jeffersonville, Ind. (20).
Maack, G. A., Cambridge, Mass. (18).
Mahan, D. H., West Point, N. Y. (9). Died in 1871.
Marsh, Dexter, Greenfield, Mass. (1).

- Marsh, James E., Roxbury, Mass. (10).
 Mather, William W., Columbus, Ohio (1).
 Maupin, S., Charlottesville, Va. (10).
 McMahon, Mathew, Albany, N. Y. (11).
 M'Conihe, Isaac, Troy, N. Y. (5).
 Meade, George G., Philadelphia, Pa. (15).
 Meek, F. B., Washington, D. C. (6). Born December 10, 1817. Died December 21, 1876.
 Mitchell, O. M., Cincinnati, Ohio (3).
 Mitchell, William, Poughkeepsie, N. Y. (3). Died in 1869.
 Mitchell, Wm. H., Florence, Ala. (17).
 Morton, S. G., Philadelphia, Pa. (1).
 Munroe, Nathan, Bradford, Mass. (6). Died in 1866.
 Munroe, William, Concord, Mass. (18). Died in 1877.
 Newlton, E. H., Cambridge, N. Y. (1).
 Nicollett, J. N., Washington, D. C. (1).
 Norton, J. P., New Haven, Conn. (1).
 Noyes, J. O., New Orleans, La. (21).
 Nutt, Cyrus, Bloomington, Ind. (20). Died in 1875.
 Oakes, William, Ipswich, Mass. (1).
 Ogden, William B., High Bridge, Westchester Co., N. Y. (17).
 Olmsted, Alexander F., New Haven, Conn. (4).
 Olmsted, Denison, New Haven, Conn. (1).
 Olmsted, Denison, jr., New Haven, Conn. (1).
 Painter, Jacob, Lima, Pa. (23). Died in 1876.
 Painter, Minshall, Lima, Pa. (7).
 Parker, Wilbur F., West Meriden, Conn. (23). Died in 1876.
 Parkman, Samuel, Boston, Mass. (1).
 Perkins, George R., Utica, N. Y. (1). Died in 1876.
 Perkins, Henry C., Newburyport, Mass. (18).
 Perry, John B., Cambridge, Mass. (16).
 Perry, M. C., New York (10).
 Piggot, A. Snowden, Baltimore, Md. (10).
 Plumb, Ovid, Salisbury, Conn. (9).
 Pope, Charles A., St. Louis, Mo. (12).
 Porter, John A., New Haven, Conn. (14).
 Pugh, Evan, Centre Co., Penn. (14).
 Read, Ezra, Terra Haute, Ind. (20).
 Redfield, William C., New York (1).
 Resor, Jacob, Cincinnati, Ohio (8). Died in 1871.
 Robb, James, Fredericton, N. B. (4).
 Robinson, Coleman T., Buffalo, N. Y. (15).
 Rockwell, John A., Norwich, Conn. (10).
 Rogers, Henry D., Glasgow, Scotland (1).
 Rogers, James B., Philadelphia, Pa. (1).
 Sager, Abram, Ann Arbor, Mich. (6). Died in 1877.
 Schaeffer, Geo. C., Washington, D. C. (1). Died in 1873.
 Scott, Joseph, Dunham, C. E. (11). Died in 1865.
 Senter, Harvey S., Aledo, Ill. (20). Died in 1875.
 Seward, William H., Auburn, N. Y. (1).
 Sherwin, Thomas, Dedham, Mass. (11). Died in 1869.
 Silliman, Benjamin, New Haven, Conn. (1).
 Skinner, John B., Buffalo, N. Y. (15). Died in 1871.
 Slack, J. H., Philadelphia, Pa. (12).
 Smith, James Y., Providence, R. I. (9). Died in 1876.
 Smith, J. V., Cincinnati, Ohio (5).
 Smith, Lyndon A., Newark, N. J. (9).
 Snell, Ebenezer S., Amherst, Mass. (2). Died in 1877.
 Sparks, Jared, Cambridge, Mass. (2).

- Stimpson, William, Chicago, Ill. (12).
Stone, Samuel, Chicago, Ill. (17). Died in 1876.
Sullivant, W. S., Columbus, Ohio (7).
Swain, James, Fort Dodge, Iowa (21). Born in 1816. Died in 1877.
Tallmadge, James, New York (1).
Taylor, Richard C., Philadelphia, Pa. (1).
Tenney, Sanborn, Williamstown, Mass. (17). Died in 1877.
Teschemacher, J. E., Boston, Mass. (1).
Thompson, Alexander, Aurora, N. Y. (6).
Thompson, Z., Burlington, Vt. (1).
Thurber, Isaac, Providence, R. I. (9).
Tillman, Samuel D., Jersey City, N. J. (15). Died in 1875.
Tolderoy, James B., Fredericton, N. B. (11).
Torrey, John, New York (1).
Torrey, Joseph, Burlington, Vt. (2). Died in 1867.
Totten, J. G., Washington, D. C. (1).
Townsend, Howard, Albany, N. Y. (10). Died in 1867.
Townsend, John K., Philadelphia, Pa. (1).
Townsend, Robert, Albany, N. Y. (9). Died in 1866.
Troost, Gerard, Nashville, Tenn. (1).
Tuomey, M., Tuscaloosa, Ala. (1).
Tyler, Edward R., New Haven, Conn. (1).
Vanceleve, John W., Dayton, Ohio (1).
Vanuxem, Lardner, Bristol, Pa. (1).
Wadsworth, James S., Genesee, N. Y. (2).
Wagner, Tobias, Philadelphia, Pa. (9).
Walker, Joseph, Oxford, N. Y. (10).
Walker, Sears C., Washington, D. C. (1).
Walker, Timothy, Cincinnati, Ohio (4).
Walsh, Benjamin D., Rock Island, Ill. (17).
Warren, John C., Boston, Mass. (1).
Watertown, Charles, Wakefield, Eng. (1).
Webster, H. B., Albany, N. Y. (1).
Webster, J. W., Cambridge, Mass. (1).
Webster, M. H., Albany, N. Y. (1).
Weed, Monroe, Wyoming, N. Y. (6). Died in 1867.
Weyman, G. W., Pittsburg, Pa. (6). Died in 1864.
Wheatland, Richard H., Salem, Mass. (13).
Whitman, Wm. E., Philadelphia, Pa. (23). Died in 1875.
Whitney, Asa, Philadelphia, Pa. (1).
Whittlesey, Charles C., St. Louis, Mo. (11). Died in 1872.
Willard, Emma, Troy, N. Y. (15).
Wilson, W. C., Carlisle, Pa. (12).
Winlock, Joseph, Cambridge, Mass. (5). Died in 1875.
Woodbury, L., Portsmouth, N. H. (1).
Woodman, John S., Hanover, N. H. (11). Died in 1871.
Wright, John, Troy, N. Y. (1).
Wyman, Jeffries, Cambridge, Mass. (1).
Young, Ira, Hanover, N. H. (7).



PUBLICATIONS

FOR SALE BY THE

AMERICAN ASSOCIATION

FOR THE

ADVANCEMENT OF SCIENCE.

TRANSACTIONS OF THE ASSOCIATION OF AMERICAN GEOLOGISTS AND NATURALISTS. 1st, 2nd and 3d Meetings. 1840-1842. in one volume. 8vo, cloth, 544 pages, 21 plates, 1843, \$3.00. Half Turkey morocco, \$4.50.

MEMOIRS OF THE AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE. 4to. No. 1, *Fossil Butterflies*. By S. H. Scudder. 100 pages, 3 plates, 1875. Paper covers, \$2.00. Half Turkey morocco, \$3.50.

PRESIDENTS' ADDRESSES, 8vo. Pamphlets, 25 cents each. President PEIRCE'S, 1853; President GOULD'S, 1869; President FOSTER'S, 1870; President HUNT'S, 1871; President SMITH'S, 1873; President LOVERING'S, 1874; President LeCONTE'S, 1875; President HILGARD'S, 1876.

REPORT OF THE COMMITTEE ON ZOOLOGICAL NOMENCLATURE, 8vo. pp. 56. Nashville Meeting, 1877. 25 cents.

PROCEEDINGS OF THE AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE. 8vo, paper. With numerous illustrations.

Vol.	I.	Philadelphia Meeting, 1848, pages 156, published 1849.
	II.	Cambridge " 1849, " 479, " 1850.
	III.	Charleston " 1850, " 239, " 1850.
	IV.	New Haven " 1850, " 449, " 1851.
	V.	Cincinnati " 1851, " 287, " 1851.
	VI.	Albany " 1851, " 480, " 1852.
	VII.	Cleveland " 1853, " 312, " 1856.
	VIII.	Washington " 1854, " 372, " 1855.
	IX.	Providence " 1855, " 357, " 1856.
	X.	2nd Albany " 1856, " 547, " 1857.
	XI.	Montreal " 1857, " 447, " 1858.
	XII.	Baltimore " 1858, " 376, " 1859.
	XIII.	Springfield " 1859, " 444, " 1860.
	XIV.	Newport " 1860, " 328, " 1861.
	XV.	Buffalo " 1866, " 174, " 1867.
	XVI.	Burlington " 1867, " 218, " 1868.
	XVII.	Chicago " 1868, " 410, " 1869.
	XVIII.	Salem " 1869, " 352, " 1870.
	XIX.	Troy " 1870, " 427, " 1871.
	XX.	Indianapolis " 1871, " 491, " 1872.
	XXI.	Dubuque " 1872, " 339, " 1873.
	XXII.	Portland " 1873, " 669, " 1874.
	XXIII.	Hartford " 1874, " 378, " 1875.
	XXIV.	Detroit " 1875, " 541, " 1876.
	XXV.	2nd Buffalo " 1876, " 424, " 1877.
	XXVI.	Nashville " 1877, " 456, " 1878.

Price of the Proceedings \$1.50 a Volume, or to Members ordering ten or more Volumes at one time, \$1.00.

Orders will be received for any of the above volumes of Proceedings, bound in full cloth, at 50 cents extra per volume; or in half Turkey morocco, at \$1.00 extra per volume. Uniform Cloth Covers for the Proceedings, by mail, 30 cents each; or 25 cents by express.

Address:

F. W. PUTNAM, Permanent Secretary,

SALEM, MASS.

506
AMA
1884

CONSTITUTION,
LIST OF MEETINGS,
OFFICERS,
COMMITTEES AND MEMBERS
OF
THE AMERICAN ASSOCIATION
FOR THE
ADVANCEMENT OF SCIENCE,
FOR THE THIRTY-THIRD MEETING,
HELD AT
PHILADELPHIA, PENN.

THE LIBRARY OF THE
SEPTEMBER, 1884.
FEB 9 1933

UNIVERSITY OF ILLINOIS

SALEM:
PUBLISHED BY THE PERMANENT SECRETARY.
1884.



CONSTITUTION,
LIST OF MEETINGS,
OFFICERS,
COMMITTEES AND MEMBERS
OF
THE AMERICAN ASSOCIATION
FOR THE
ADVANCEMENT OF SCIENCE,
FOR THE THIRTY-THIRD MEETING,
HELD AT
PHILADELPHIA, PENN.

THE LIBRARY OF THE

FEB 9 1938
SEPTEMBER 1884.

UNIVERSITY OF ILLINOIS

SALEM:
PUBLISHED BY THE PERMANENT SECRETARY.
1884.

EDITED BY
FREDERICK W. PUTNAM,
Permanent Secretary.

PRINTED AT
THE SALEM PRESS,
SALEM, MASS.

506
AMA
1884

OFFICERS ELECTED

FOR THE

PHILADELPHIA MEETING.

SEPTEMBER THIRD, 1884.

PRESIDENT.

J. P. LESLEY, of Philadelphia.

VICE PRESIDENTS.

- A. Mathematics and Astronomy—H. T. EDDY of Cincinnati.
- B. Physics—JOHN TROWBRIDGE of Cambridge.
- C. Chemistry—JOHN W. LANGLEY of Ann Arbor.
- D. Mechanical Science—R. H. THURSTON of Hoboken.
- E. Geology and Geography—N. H. WINCHELL of Minneapolis.
- F. Biology—E. D. COPE of Philadelphia.
- G. Histology and Microscopy—T. G. WORMLEY of Philadelphia.
- H. Anthropology—E. S. MORSE of Salem.
- I. Economic Science and Statistics—JOHN EATON of Washington.

PERMANENT SECRETARY.

F. W. PUTNAM of Cambridge.

GENERAL SECRETARY.

ALFRED SPRINGER of Cincinnati.

ASSISTANT GENERAL SECRETARY.

EDWARD S. HOLDEN of Madison.

SECRETARIES OF THE SECTIONS.

- A. Mathematics and Astronomy—G. W. HOUGH of Chicago.
- B. Physics—N. D. C. HODGES of Salem.
- C. Chemistry—R. B. WARDER of North Bend.
- D. Mechanical Science—J. BURKITT WEBB of Ithaca.
- E. Geology and Geography—EUGENE A. SMITH of Tuscaloosa.
- F. Biology—C. E. BESSEY of Ames, Iowa.
- G. Histology and Microscopy—ROMYN HITCHCOCK of New York.
- H. Anthropology—W. H. HOLMES of Washington.
- I. Economic Science and Statistics—C. W. SMILEY of Washington.

TREASURER.

WILLIAM LILLY of Mauch Chunk.

MEMBERS OF THE STANDING COMMITTEE

FOR THE

PHILADELPHIA MEETING.

Past Presidents.—JAMES D. DANA of New Haven; JAMES HALL of Albany; ISAAC LEA of Philadelphia; F. A. P. BARNARD of New York; J. S. NEWBERRY of New York; B. A. GOULD of Boston; T. STERRY HUNT of Montreal; ASA GRAY of Cambridge; JOSEPH LOVERING of Cambridge; J. E. HILGARD of Washington; SIMON NEWCOMB of Washington; O. C. MARSH of New Haven; GEORGE F. BARKER of Philadelphia; GEORGE J. BRUSH of New Haven; J. W. DAWSON of Montreal; C. A. YOUNG of Princeton.

Vice Presidents of the Last Meeting.—W. A. ROGERS of Cambridge; H. A. ROWLAND of Baltimore; EDWARD W. MORLEY of Cleveland; DE VOLSON WOOD of Hoboken; C. H. HITCHCOCK of Hanover; W. J. BEAL of Lansing; J. D. COX of Cincinnati; O. T. MASON of Washington; F. B. HOUGH of Lowville.

Officers of the Present Meeting.—J. P. LESLEY of Philadelphia; H. T. EDDY of Cincinnati; JOHN TROWBRIDGE of Cambridge; JOHN W. LANGLEY of Ann Arbor; R. H. THURSTON of Hoboken; N. H. WINCHELL of Minneapolis; E. D. COPE of Philadelphia; T. G. WORMLEY of Philadelphia; E. S. MORSE of Salem; JOHN EATON of Washington; F. W. PUTNAM of Cambridge; ALFRED SPRINGER of Cincinnati; EDWARD S. HOLDEN of Madison; G. W. HOUGH of Chicago; N. D. C. HODGES of Salem; R. B. WARDER of North Bend; J. BURKITT WEBB of Ithaca; EUGENE A. SMITH of Tuscaloosa; C. E. BESSEY of Ames; ROMYN HITCHCOCK of New York; W. H. HOLMES of Washington; C. W. SMILEY of Washington; WILLIAM LILLY of Mauch Chunk.

From the Association at Large.—A fellow to be elected from each Section.

LOCAL COMMITTEE OF ARRANGEMENTS.

President, HON. JOHN WELSH.

Vice-Presidents.

ISAAC LEA, LL. D., WM. PEPPER, M. D. LL. D., PROF. JOSEPH LEIDY, M. D.,
WM. SELLERS, ESQ. EDWARD T. STEEL, ESQ.

Secretaries,

PROF. H. CARVILL LEWIS, EDW. J. NOLAN, M. D.

Treasurer, A. J. DREXEL, ESQ.

GENERAL LOCAL COMMITTEE.

Miss Helen C. deS. Abbott, Mr. John S. Alexander, Dr. Harrison Allen, Mr. Chas. A. Ashburner, Mrs. Richard L. Ashhurst, Mr. John R. Baker, Miss Elise Willing Balch, Prof. Geo. F. Barker, Mrs. Geo. F. Barker, Mr. Wharton Barker, Dr. Roberts Bartholow, Mr. Alexander Biddle, Mr. A. Sidney Biddle, Mr. Jacob Binder, Mr. F. M. Bissel, Rev. Geo. D. Boardman, D. D., Dr. Rachel L. Bodley, Hon. Geo. H. Boker, Dr. D. G. Brinton, Mr. Wm. Brockie, Mr. J. C. Brooks, Mr. Alexander Brown, Mr. A. J. Cassatt, Mrs. Mariné J. Chase, Prof. Pliny E. Chase, Mrs. Pliny E. Chase, Prof. Thom. Chase, Mr. Samuel Chew, Mrs. Samuel Chew, Mr. Geo. W. Childs, Mr. James L. Claghorn, Mr. Clarence H. Clark, Mrs. Clarence H. Clark, Mrs. Edw. H. Coates, Mr. Thomas Cochran, Prof. Edw. D. Cope, Mrs. Edw. D. Cope, Mr. Robt. R. Corson, Mrs. Robt. R. Corson, Mr. Geo. K. Crozer, Mrs. Geo. K. Crozer, Mr. Francis A. Cunningham, Mr. Samuel Dickson, Mr. Hamilton Disston, Mr. Thomas Dolan, Mr. A. J. Drexel, Col. Frank M. Etting, Mr. J. E. Farnum, Mr. John Fernie, Prof. A. H. Fetterolf, Mr. E. H. Fitler, Dr. A. E. Foote, Mr. Albert Foster, Mr. W. H. Frailey, Mr. Frederick Fraley, Dr. Persifor Frazer, Mrs. Persifor Frazer, Mr. W. W. Frazier, Mr. Horace Howard Furness, Mr. Philip C. Garrett, Prof. F. A. Genth, Mr. Henry C. Gibson, Mr. F. B. Gowen, Mr. Frederic Graff, Mr. Simon Gratz, Mrs. C. A. Griscom, Mrs. J. L. Hollowell, Mr. M. P. Handy, Mr. Geo. Harding, Mr. W. W. Harding, Hon. J. I. Clark Hare, Mr. J. Campbell Harris, Mrs. Alfred C. Harrison, Mr. A. W. Harrison, Mr. Chas. C. Harrison, Mr. Thomas S. Harrison, Prof. L. M. Haupt, Prof. F. V. Hayden, Dr. I. Minis Hays, Prof. Angelo Heilprin, Mr. Rudolph Hering, Mr. Thos. Hockley, Dr. Geo. H. Horn, Prof. Edwin J. Houston, Mr. Sam'l B. Huey, Gen. H. S. Huidekoper, Mrs. Wm. Hunt, Miss Agnes Irwin, Prof. Edmund J. James, Mr. Wm. W. Justice, Mrs. W. W. Justice, Mr. Geo. DeB. Keim, Prof. E. O. Kendall, Rev. Wm. Kieran, D. D., Hon. Sam'l G. King, Mr. B. Andrews Knight, Mr. Edward C. Knight, Mr. Geo. D. Krumbaar, Dr. Isaac Lea, Dr. Joseph Leidy, Mrs. Joseph Leidy, Prof. J. P. Lesley, Mrs. J. P. Lesley, Mr. Edw. M. Lewis, Mr. Enoch Lewis, Mr. Henry Lewis, Prof. H. Carvill Lewis, Mrs. H. Carvill Lewis, Hon. Wm. H. Lex, Mr. J. B. Lippincott, Mr. J. Dundas Lippincott, Mrs. J. Dundas Lippincott, Mr. James Macalister, Mrs. G. A. McCall, Rev. H. C. McCook, D. D., Rev. J. S. MacIntosh, D. D., Mr. Wm. V. McKean, Dr. Geo. I. McLeod, Hon. Wayne MacVeagh, Mrs. Wayne MacVeagh, Rev. W. N. McVickar, D. D., Pres't Edw. H. Magill, Prof. Thos. Meehan, Mr. J. Vaughan Merrick, Mr. John H. Michener, Mr. Merle Middleton, Mr. J. E. Mitchell, Mr. John T. Morris, Mr. D. S. Newhall, Dr. Edw. J. Nolan, Mr. Alexander E. Outerbridge, jr., Miss Eleanor Patterson, Prof. C. N. Peirce, Mr. Joseph Pennell, Dr. Wm. Pepper, Mrs. Wm. Pepper, Mr. C. P. Perot, Mr. Wm. J. Philips, Mr. Henry Phillips, jr., Mr. Moro Phillips, Mr. Franklin Platt, Mr. J. Sergeant Price, Mr. Theo. D. Rand, Mr. John H. Redfield, Prof. Geo. I. Riché, Mrs. Fairman Rogers, Mr. E. A. Rollins, Dr. W. S. W. Ruschenberger, Prof. S. P. Sadtler, Dr. Carl Seiler, Mr. Coleman Sellers, Mr. John Sellers, Mr. Wm. Sellers, Mr. John

Shallcross, Mr. S. R. Shipley, Mr. Thomas Simpson, Mr. J. C. Sims, jr., Mr. Aubrey H. Smith, Mr. Lloyd P. Smith, Hon. Wm. B. Smith, Col. A. Loudon Snowden, Prof. M. B. Snyder, Mr. Edw. T. Steel, Rt. Rev. Wm. Bacon Stevens, D. D., Mrs. Cornelius Stevenson, Mr. Frederic D. Stone, Mr. J. C. Strawbridge, Mrs. J. C. Strawbridge, Mr. Wm. P. Tatham, Mr. G. Morrison Taylor, Mr. Frank Thomson, Mrs. Frank Thomson, Dr. Wm. Thomson, Hon. A. W. Tourgée, Mr. Jos. B. Townsend, Mr. Henry C. Townsend, Dr. Jas. Tyson, Dr. Wm. H. Wahl, Mr. W. H. Walmsley, Mr. John Wanamaker, Hon. John Welsh, Mr. Joseph Wharton, Dr. Frances Emily White, Mr. James S. Whitney, Mr. F. H. Williams, Mrs. F. H. Williams, Mr. I. V. Williamson, Mr. Joseph M. Wilson, Mrs. Caspar Wister, Mrs. Owen J. Wister, Mr. Edw. H. Wood, Mr. Richard Wood, Dr. Stuart Wood, Dr. T. G. Wormley, Mrs. E. Yarnall, Mr. Joseph Zentmayer.

EXECUTIVE COMMITTEE.

Chairman.—HON. JOHN WELSH.

Secretary.—DR. EDW. J. NOLAN.

Mr. Chas. A. Ashburner, Prof. Geo. F. Barker, Mr. Alexander Biddle, Mr. Robert R. Corson, Mr. A. J. Drexel, Dr. Persifor Frazer, Prof. Angelo Heilprin, Gen. H. S. Huidekoper, Mrs. Wm. Hunt, Prof. Edmund J. James, Mr. Geo. D. Krumbhaar, Dr. Isaac Lea, Dr. Joseph Leidy, Prof. H. Carvill Lewis, Mrs. J. Dundas Lippincott, Dr. Edw. J. Nolan, Dr. Wm. Pepper, Theo. D. Rand, Mr. Wm. Sellers, Mr. John C. Sims, Jr., Mr. Edw. T. Steel, Mr. John Wanamaker, Hon. John Welsh, Mr. F. H. Williams, Mr. Jos. M. Wilson.

LADIES' RECEPTION COMMITTEE.

Chairman.—MRS. J. DUNDAS LIPPINCOTT.

Secretary.—MRS. WM. HUNT.

Miss Helen C. DeS. Abbott, Mrs. Richard L. Ashhurst, Miss Elise Willing Balch, Mrs. Geo. F. Barker, Prof. Rachel L. Bodley, M. D., Mrs. Pliny E. Chase, Mrs. Samuel Chew, Mrs. Clarence H. Clark, Mrs. Edw. H. Coates, Mrs. Edw. D. Cope, Mrs. Robert R. Corson, Mrs. Geo. K. Crozer, Mrs. Persifor Frazer, Mrs. J. L. Hollowell, Mrs. Alfred C. Harrison, Mrs. Wm. Hunt, Miss Agnes Irwin, Mrs. W. W. Justice, Mrs. Jos. Leidy, Mrs. J. P. Lesley, Mrs. H. Carvill Lewis, Mrs. J. Dundas Lippincott, Mrs. G. A. McCall, Mrs. Wayne MacVeagh, Mrs. William Pepper, Mrs. Fairman Rogers, Mrs. Cornelius Stevenson, Mrs. Frank Thompson, Dr. Frances Emily White, Mrs. Caspar Wister, Mrs. Owen J. Wister, Mrs. Francis H. Williams, Mrs. E. Yarnall.

COMMITTEE ON INVITATIONS AND RECEPTIONS.

Chairman.—PROF. WM. PEPPER, M. D., LL. D.

Secretary.—PROF. PERSIFOR FRAZER, D. D.

Rev. Geo. D. Boardman, D. D., Dr. D. G. Brinton, Mr. A. J. Cassatt, Prof. Thos. Chase, LL. D., Mr. Geo. W. Childs, Mr. Jas. L. Claghorn, Mr. Hamilton Disston, Mr. Thos. Dolan, Col. Frank M. Etting, Dr. Persifor Frazer, Mr. W. W. Frazier, Mr. Horace Howard Furness, Mr. Henry C. Gibson, Mr. J. Campbell Harris, Mr. Chas. C. Harrison, Dr. I. Minis Hays, Gen. H. S. Huidekoper, Mr. Geo. DeB. Keim, Rev. Wm. Kieran, D. D., Dr. Joseph Leidy, Prof. H. Carvill Lewis, Mr. J. Dundas Lippincott, Mrs. J. Dundas Lippincott, Hon. Wayne MacVeagh, Rev. H. C. McCook, D. D., Prof. Edw. H. Magill, Rev. J. S. MacIntosh, D. D., Rev. W. N. McVickar, D. D., Mr. J. Vaughan Merrick, Dr. Wm. Pepper, Mr. Wm. Sellers, Mr. S. R. Shipley, Mr. Thos. Simpson, Col. A. Loudon Snowden, Rt. Rev. Wm. Bacon Stevens, D. D., Mr. J. C. Strawbridge, Mr. Frank Thomson, Mr. John Wanamaker, Hon. John Welsh, Mr. Joseph Wharton.

COMMITTEE ON NOMINATIONS.

Chairman.—PROF. JOSEPH LEIDY, M. D.

Secretary.—PROF. H. CARVILL LEWIS.

Prof. Geo. F. Barker, Mr. A. J. Drexel, Mr. Philip C. Garrett, Gen. H. S. Huidekoper, Dr. Isaac Lea, Dr. Jos. Leidy, Prof. J. P. Lesley, Prof. H. Carvill Lewis, Mrs. J. Dundas Lippincott, Rev. H. C. McCook, D. D., Dr. Edw. J. Nolan, Dr. Wm. Pepper, Mr. John H. Redfield, Mr. Coleman Sellers, Mr. John C. Sims, Jr., Mr. Edw. T. Steel, Mr. Frank Thomson, Mr. John Wanamaker, Hon. John Welsh, Mr. F. H. Williams, Mr. Jos. M. Wilson.

COMMITTEE ON ROOMS AND PLACES OF MEETING.

Chairman.—PROF. GEO. F. BARKER, M. D.,*Secretary*.—PROF. EDMUND J. JAMES.

Dr. Harrison Allen, Prof. Geo. F. Barker, Hon. Geo. H. Boker, Mr. Robert R. Corson, Mr. Samuel Dickson, Mr. Simon Gratz, Mr. A. W. Harrison, Dr. Geo. H. Horn, Mr. Sam'l B. Huey, Gen. H. S. Huidekoper, Prof. E. O. Kendall, Mr. B. Andrews Knight, Hon. Wm. H. Lex, Mr. James Macallister, Dr. Geo. I. McLeod, Prof. Edw. H. Magill, Mr. J. E. Mitchell, Mr. Wm. J. Philips, Prof. Geo. I. Riché, Dr. Wm. Thomson, Mr. Henry C. Townsend, Dr. Jas. Tyson, Mr. Jos. M. Wilson, Prof. Edmund J. James, Mr. John Sellers.

COMMITTEE ON TRANSPORTATION AND EXCURSIONS.

Chairman.—MR. JOHN C. SIMS, JR.*Secretaries*.—MR. GEO. D. KRUMBHAAR, MR. THEO. D. RAND.

Mr. John R. Baker, Mr. F. M. Bissell, Mr. A. J. Cassatt, Mr. Thomas Cochran, Prof. E. D. Cope, Mr. Albert Foster, Mr. W. H. Frailey, Prof. F. A. Genth, Mr. F. B. Gowen, Mr. C. A. Griscom, Mr. M. P. Handy, Mr. Geo. Harding, Prof. F. V. Hayden, Prof. Angelo Heilprin, Mr. Rudolph Hering, Rev. Wm. Kieran, D. D., Mr. Geo. D. Krumbhaar, Prof. J. P. Lesley, Mr. Enoch Lewis, Hon. Wayne MacVeagh, Prof. Thos. Meehan, Mr. D. S. Newhall, Mr. Theo. D. Rand, Dr. W. S. W. Ruschenberger, Mr. J. C. Sims, Jr., Mr. Frank Thomson, Dr. Wm. Thomson.

COMMITTEE ON FINANCE.

Chairman.—MR. JOHN WANAMAKER.*Secretary*.—MR. ALEXANDER BIDDLE.

Mr. Wharton Barker, Mr. Alex. Biddle, Mr. Wm. Brockie, Mr. Alex. Brown, Mr. A. J. Cassatt, Mr. Jas. L. Claghorn, Mr. Clarence H. Clark, Mr. Hamilton Disston, Mr. Thomas Dolan, Mr. E. H. Fittler, Mr. Philip C. Garrett, Mr. F. B. Gowen, Mr. J. Campbell Harris, Mr. Thos. S. Harrison, Hon. Sam'l G. King, Mr. Edw. C. Knight, Mr. Henry Lewis, Mr. J. B. Lippincott, Mr. John H. Michener, Mr. Moro Phillips, Mr. E. A. Rollins, Mr. Wm. Sellers, Mr. S. R. Shipley, Mr. John Wanamaker, Hon. John Welsh, Mr. Jos. Wharton, Mr. I. V. Williamson, Mr. Richard Wood.

COMMITTEE ON HOTELS, LUNCHEONS AND LODGINGS.

Chairman.—MR. JOS. M. WILSON.*Secretary*.—MR. ROBT. R. CORSON.

Prof. Geo. F. Barker, Dr. Roberts Bartholow, Mr. A. Sydney Biddle, Mr. J. C. Brooks, Prof. P. E. Chase, Mr. Robert R. Corson, Mr. Geo. K. Crozer, Mr. John Fernie, Mr. Frederick Graff, Mr. Thomas Hockley, Mr. Wm. W. Justice, Mr. Edw. M. Lewis, Rev. H. C. McCook, D. D., Mr. Merle Middleton, Mr. John T. Morris, Mr. Wm. V. McKean, Mr. Alex. E. Outerbridge, Jr., Mr. John Shallcross, Mr. Aubrey H. Smith, Mr. G. Morrison Taylor, Mr. W. P. Tatham, Mr. Jas. B. Whitney, Mr. Jos. M. Wilson, Dr. Stuart Wood.

COMMITTEE ON PRINTING.

Chairman.—MR. F. H. WILLIAMS.*Secretaries*.—DR. EDW. J. NOLAN, PROF. ANGELO HEILPRIN.

Mr. John R. Baker, Rev. Dr. Geo. D. Boardman, Mr. Francis A. Cunningham, Col. Frank M. Etting, Mr. M. P. Handy, Mr. W. W. Harding, Hon. J. I. Clark Hare, Prof. Angelo Heilprin, Mr. Rudolph Hering, Mr. Thos. Hockley, Mr. J. B. Lippincott, Prof. Thos. Meehan, Dr. Edw. J. Nolan, Mr. Jos. Pennell, Mr. C. P. Perot, Mr. Henry Phillips, Jr., Mr. Lloyd P. Smith, Mr. Frederick D. Stone, Mr. J. C. Strawbridge, Hon. A. W. Tourgee, Dr. Wm. H. Wahl, Hon. John Welsh, Mr. F. H. Williams.

COMMITTEE ON MAILS, TELEGRAMS AND EXPRESS.

Chairman.—GEN. H. S. HUIDEKOPER.*Secretary*.—MR. CHAS. A. ASHBURNER.

John S. Alexander, Chas. A. Ashburner, Dr. A. E. Foote, Mr. J. E. Farnum, Prof. A. H. Fetterolf, Prof. Edwin J. Houston, Gen. H. S. Huidekoper, Prof. C. N. Pierce, Mr. Franklin Platt, Dr. Carl Seiler, Mr. Jos. B. Townsend, Mr. W. H. Wahnsley, Mr. Edw. H. Wood.

SPECIAL COMMITTEES.

1. *Permanent Committee on Weights, Measures and Coinage.*

F. A. P. BARNARD of New York,	H. A. NEWTON of New Haven,
B. A. GOULD of Boston,	E. B. ELLIOTT of Washington,
J. E. HILGARD of Washington,	JOHN TROWBRIDGE of Cambridge,
A. M. MAYER of Hoboken.	

2. *Committee on Membership.*

THE MEMBERS OF THE STANDING COMMITTEE.

3. *Committee on the best methods of Science-Teaching in the Public Schools.*

E. L. YOUMANS of New York,	J. W. POWELL of Washington,
A. R. GROTE of New York,	N. S. SHALER of Cambridge,
J. S. NEWBERRY of New York,	N. T. LUPTON of Nashville.

4. *Committee on the Registration of Deaths, Births, and Marriages.*

E. B. ELLIOTT of Washington,	F. B. HOUGH of Lowville,
J. B. KILLEBREW of Nashville,	J. S. COPES of New Orleans,
E. T. COX of San Francisco,	JOHN COLLETT of Indianapolis.

5. *Committee on Stellar Magnitudes.*

E. C. PICKERING of Cambridge,	E. S. HOLDEN of Madison,
LEWIS BOSS of Albany,	SIMON NEWCOMB of Washington,
S. W. BURNHAM of Chicago,	C. H. F. PETERS of Clinton,
ASAPH HALL of Washington,	ORMOND STONE of Univ. of Va.
WILLIAM HARKNESS of Washington,	C. A. YOUNG of Princeton.

6. *Committee to confer with Committees of Foreign Associations for the Advancement of Science with reference to an International Convention of Scientific Associations.*

T. STERRY HUNT of Montreal,	ALEXANDER AGASSIZ of Cambridge.
SIMON NEWCOMB of Washington.	

7. *Committee on Indexing the Literature of the Chemical Elements.*

H. CARRINGTON BOLTON of Hart-	F. W. CLARK of Washington,
ford,	A. R. LEEDS of Hoboken,
IRA REMSEN of Baltimore,	A. A. JULIEN of New York.

8. *Committee on International Congress of Geologists.*

JAMES HALL of Albany,	T. STERRY HUNT of Montreal,
J. W. DAWSON of Montreal,	C. H. HITCHCOCK of Hanover,
J. S. NEWBERRY of New York,	RAPHAEL PUMPELLY of Newport,
J. P. LESLEY of Philadelphia.	

9. *Committee to confer with the United States Geologist in regard to coöperation between the Government and State Geological Surveys.*

JAMES HALL of Albany,	C. H. HITCHCOCK of Hanover,
T. STERRY HUNT of Montreal,	J. P. LESLEY of Philadelphia,
J. S. NEWBERRY of New York,	G. H. COOK of Brunswick,
N. H. WINCHELL of Minneapolis,	E. A. SMITH of Tuscaloosa,
JOSEPH LE CONTE of San Francisco.	

This Committee has power to add to its number.

10. *Committee on Interchange of Courtesies between the American and British Associations for the Advancement of Science.*

C. A. YOUNG of Princeton,	T. STERRY HUNT of Montreal,
J. P. LESLEY of Philadelphia,	E. S. MORSE of Salem,
J. W. DAWSON of Montreal,	T. C. MENDENHALL of Columbus,
F. W. PUTNAM of Cambridge.	

11. *Committee in relation to Duty on Scientific Books.*

H. A. ROWLAND of Baltimore,	J. W. POWELL of Washington,
C. A. YOUNG of Princeton,	J. D. COX of Cincinnati,
E. S. MORSE of Salem.	

12. *Auditors.*

HENRY WHEATLAND of Salem,	THOMAS MEEHAN of Germantown.
---------------------------	------------------------------

MEETINGS.

MEETINGS AND OFFICERS OF THE AMERICAN ASSOCIATION OF GEOLOGISTS AND NATURALISTS.

MEETING.	DATE.	PLACE.	CHAIRMAN.	SECRETARY.	ASSIST. SEC'Y.	TREASURER.
1st	April 2, 1840,	Philadelphia,	Edward Hitchcock,*	L. C. Beck,*	{ B. Silliman, jr., C. B. Trego, J. D. Whitney, M. B. Williams,	John Locke.*
2d	April 5, 1841,	Philadelphia,	Benjamin Silliman,*	L. C. Beck,*		
3d	April 25, 1842,	Boston,	S. G. Morton,*	C. T. Jackson,		
4th	April 25, 1843,	Albany,	Henry D. Rogers,*	B. Silliman, jr.,		
5th	May 8, 1844,	Washington,	John Locke,*	{ B. Silliman, jr., O. P. Hubbard,	Douglas Houghton.*	Douglas Houghton.*
6th	April 30, 1845,	New Haven,	Wm. B. Rogers,	{ B. Silliman, jr., J. Lawrence Smith,*		
7th	Sept. 2, 1846,	New York,	C. T. Jackson,*	B. Silliman, jr.,		
8th	Sept. 20, 1847,	Boston,	Wm. B. Rogers,†	Jeffries Wyman,*		

* Deceased.

† Professor ROGERS, as chairman of this last meeting, called the first meeting of the new Association to order and presided until it was fully organized by the adoption of a constitution. As he was thus the first presiding officer of the new Association, it was directed at the Hartford meeting that his name be placed at the head of the Past Presidents of the American Association for the Advancement of Science.

MEETINGS AND OFFICERS OF THE AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE.

MEETINGS.

MEETING.	DATE.	PLACE.	PRESIDENT.	VICE-PRESIDENT.	GENERAL SECRETARY.	PERMANENT SEC'Y.	TREASURER.
1-t	Sept. 20, 1848.	Philadelphia, Pa.,	W. C. Redfield,*		Walter R. Johnson,*		Jeffries Wyman.*
2d	Aug. 14, 1849,	Cambridge, Mass.,	Joseph Henry,*		E. N. Horsford, 1		A. L. Elwyn.*
3d	Mar. 12, 1850,	Charleston, S. C.,	A. D. Bache,* 2		L. R. Gibbs, 3		St. J. Ravenel.* 4
4th	Aug. 19, 1850,	New Haven, Conn.,	A. D. Bache,*		E. C. Herrick,*		A. L. Elwyn.*
5th	May 5, 1851.	Cincinnati, Ohio,	A. D. Bache,*		W. B. Rogers, 5 *	S. F. Baird,	S. F. Baird. 6
6th	Aug. 19, 1851.	Albany, N. Y.,	Louis Agassiz,*		W. B. Rogers,*	S. F. Baird,	A. L. Elwyn.*
7th	July 28, 1853.	Cleveland, Ohio,	Benjamin Pierce,*		S. St. John, 7	S. F. Baird,	A. L. Elwyn.*
8th	April 26, 1854.	Washington, D.C.,	J. D. Dana,		J. Lawrence Smith,*	Joseph Lovering,	J. L. LeConte.* 8
9th	Aug. 15, 1855.	Providence, R. I.,	John Torrey,*		Wolcott Gibbs,	Joseph Lovering,	A. L. Elwyn.*
10th	Aug. 20, 1856.	Albany, N. Y.,	James Hall,	Alexis Caswell,*	B. A. Gould,	Joseph Lovering,	A. L. Elwyn.*
11th	Aug. 12, 1857.	Montreal, Canada.	Alexis Caswell,* 9	John E. Holbrook,* 11	John L. LeConte,*	Joseph Lovering,	A. L. Elwyn.*
12th	April 28, 1858.	Baltimore, Md.,	Alexis Caswell,* 10	Edward Hitchcock,*	W. M. Gillespie,* 11	Joseph Lovering,	A. L. Elwyn.*
13th	Aug. 3, 1859,	Springfield, Mass.,	Stephen Alexander,*	B. A. Gould,	William Chauvenet,*	Joseph Lovering,	A. L. Elwyn.*
14th	Aug. 1, 1860,	Newport, R. I.,	Isaac Lea,	A. A. Gould,* 12	Joseph LeConte,	Joseph Lovering,	A. L. Elwyn.*
15th	Aug. 15, 1866.	Buffalo, N. Y.,	F. A. P. Barnard,	Wolcott Gibbs,	Elias Loomis, 13	Joseph Lovering,	A. L. Elwyn.*
16th	Aug. 21, 1867.	Burlington, Vt.,	J. S. Newberry,	Charles Whittlesey,	C. S. Lyman,	Joseph Lovering,	A. L. Elwyn.*
17th	Aug. 5, 1868.	Chicago, Ill.,	B. A. Gould,	O. N. Rood,	Simon Newcomb, 14	Joseph Lovering,	A. L. Elwyn.*
18th	Aug. 18, 1869,	Salem, Mass.,	J. W. Foster,*	T. S. Hunt,	O. C. Marsh,	F. W. Putnam, 15	A. L. Elwyn.*
19th	Aug. 17, 1870.	Troy, N. Y.,	T. S. Hunt, 16	G. F. Barker,	F. W. Putnam, 17	Joseph Lovering,	A. L. Elwyn.*
20th	Aug. 16, 1871.	Indianapolis, Ind.,	Asa Gray.	Alex. Winchell,	F. W. Putnam,	Joseph Lovering,	W. S. Vaux.*
21st	Aug. 15, 1872.	Dubuque, Iowa,	J. Lawrence Smith,*	A. H. Worthen,†	E. S. Morse,	Joseph Lovering,	W. S. Vaux.*
22d	Aug. 20, 1873.	Portland, Me.,	Joseph Lovering,	C. S. Lyman,	C. A. White,	F. W. Putnam,	W. S. Vaux.*
23d	Aug. 12, 1874.	Hartford, Conn.,	J. L. LeConte,*		A. C. Hamlin,	F. W. Putnam,	W. S. Vaux.†

1. In place of Jeffries Wyman, *not present*.
2. In place of Joseph Henry, *not present*.
3. In place of E. C. Herrick, *not present*.
4. In place of A. L. Elwyn, *not present*.
5. In place of E. C. Herrick, *not present*.
6. In place of A. L. Elwyn, *not present*.
7. In place of J. D. Dana, *not present*.
8. In place of A. L. Elwyn, *not present*.
9. In place of J. W. Bailey, *deceased*.
10. In place of Jeffries Wyman, *not present*.
11. In place of Wm. Chauvenet, *not present*.
12. In place of R. W. Gibbs, *not present*.
13. In place of W. P. Trowbridge, *not present*.
14. In place of A. P. Rockwell, *called home 1st day*.
15. In place of Joseph Lovering, *in Europe*.
16. In place of C. F. Chauvenet, *too ill to be present*.
17. In place of C. F. Hartt, *in Brazil*.

* Deceased, † Not present at the meeting.

MEETINGS AND OFFICERS OF THE ASSOCIATION (Continued).

MEET- ING.	DATE.	PLACE.	PRESIDENT.	VICE PRESIDENT, SECTION A.	VICE PRESIDENT, SECTION B.	CHAIRMAN OF PERMANENT SUBSECTION OF CHEMISTRY.	CHAIRMAN OF PERMANENT SUBSECTION OF ANTHROPOLOGY.	CHAIRMAN OF PERMANENT SUBSECTION OF MICROSCOPY.	CHAIRMAN OF PERMANENT SUBSECTION OF ENTOMOLOGY.
24th	Aug 11, 1875.	Detroit, Mich.,	J. E. Hilgard,	H. A. Newton,	J. W. Dawson,	S. W. Johnson,	L. H. Morgan,*	—	—
25th	Aug. 23, 1876.	Buffalo, N. Y.,	W. B. Rogers,*	C. A. Young,	E. S. Morse,	G. F. Barker,	L. H. Morgan,*	R. H. Ward,	—
26th	Aug. 29, 1877.	Nashville, Tenn.,	S. Newcomb,	R. H. Thurston, ¹	O. C. Marsh,	N. T. Lupton,	Daniel Wilson, [†]	R. H. Ward,	—
27th	Aug. 21, 1878.	St. Louis, Mo.,	O. C. Marsh,	R. H. Thurston,	Aug. R. Grote,	F. W. Clarke, ⁴	— ²	R. H. Ward, ³	—
28th	Aug. 27, 1879.	Saratoga, N. Y.,	G. F. Barker,	S. P. Langley,	J. W. Powell,	F. W. Clarke, ⁴	Daniel Wilson,	E. W. Morley,	—
29th	Aug. 25, 1880.	Boston, Mass.,	L. H. Morgan,*	Asaph Hall,	Alex. Agassiz,	J. M. Ordway,	J. W. Powell,	S. A. Lettimore,	—
30th	Aug. 17, 1881.	Cincinnati, Ohio,	G. J. Brush,	Wm. Harkness, ⁷	E. T. Cox, ⁸	G. C. Caldwell, ⁹	G. Mallery,	A. B. Hervey,	J. G. Morris.

MEETINGS.

PERMANENT SECRETARY.	GENERAL SECRETARY.	SECRETARY OF SECTION A.	SECRETARY OF SECTION B.	SECRETARY OF PERMANENT SUBSECTION OF CHEMISTRY.	SECRETARY OF PERMANENT SUBSECTION OF ANTHROPOLOGY.	SECRETARY OF PERMANENT SUBSECTION OF MICROSCOPY.	SECRETARY OF PERMANENT SUBSECTION OF ENTOMOLOGY.	TREASURER.
F. W. Putnam,	S. H. Scudder,	{ S. P. Langley, T. C. Mendenhall,	E. S. Morse,	F. W. Clarke,	F. W. Putnam,	—	—	W. S. Vaux.*
F. W. Putnam,	T. C. Mendenhall,	A. W. Wright,	Albert H. Tuttle,	H. C. Bolton,	O. T. Mason,	E. W. Morley,	—	W. S. Vaux.*
F. W. Putnam,	Aug. R. Grote,	H. C. Bolton,	Wm. H. Dall,	P. Schweitzer,	— ²	T. O. Summers, Jr.,	—	W. S. Vaux. [†] *
F. W. Putnam,	H. C. Bolton,	E. E. Nipher,	George Little,	A. P. S. Stuart,	— ²	G. J. Engelmann,	—	W. S. Vaux. [†] *
F. W. Putnam,	H. C. Bolton, ⁵	J. K. Rees,	W. H. Dall, ⁶	W. R. Nichols,	J. G. Henderson,	A. B. Hervey,	—	W. S. Vaux. [†] *
F. W. Putnam,	J. K. Rees,	H. B. Mason,	C. V. Riley,	C. E. Munroe,	J. G. Henderson,	A. B. Hervey,	—	W. S. Vaux.*
F. W. Putnam,	C. V. Riley,	E. T. Tappan, ¹⁰	Wm. Saunders,	A. Springer, ¹²	J. G. Henderson,	W. H. Seaman, ¹¹	B. P. Mann,	W. S. Vaux. [†] *

¹ In the absence of E. C. Pickering.

⁴ In the absence of Ira Rensen.

⁷ In the absence of A. M. Mayer.

¹⁰ In the absence of John Trowbridge.

* Deceased.

² The Subsection united with Sec. B.

⁶ In the absence of George Little.

⁸ In the absence of George Engelmann.

¹¹ In the absence of S. P. Sharples.

[†] Not present

³ In the absence of G. S. Blackie.

⁶ In the absence of A. C. Wetherby.

⁹ In the absence of W. R. Nichols.

¹² In place of H. W. Wiley, called away.

MEETINGS.

MEETINGS AND OFFICERS OF THE ASSOCIATION. (Continued.)

MEETING.	DATE.	PLACE.	PRESIDENT.	VICE PRESIDENTS.				
				Section A.	Section B.	Section C.	Section D.	Section E.
31st	Aug. 23, 1882.	Montreal, Can.	J. W. Dawson.	W. A. Rogers, ¹	T. C. Mendenhall,	H. C. Bolton,	W. P. Trowbridge,	E. T. Cox,
32nd	Aug. 15, 1883.	Minneapolis, M.	C. A. Young,	W. A. Rogers,	H. A. Rowland,	E. W. Morley,	De Volsen Wood, ⁷	C. H. Hitchcock,
33rd	Sept. 4, 1884.	Philadelphia, Pa.	J. P. Lesley,	H. T. Eddy,	J. Trowbridge,	J. W. Langley,	R. H. Thurston,	N. H. Winchell,

VICE PRESIDENTS.				SECRETARIES OF SECTIONS.				
Section F.	Section G.	Section H.	Section I.	Permanent Secretary.	General Secretary.	Assistant Gen. Secretary.	Section A.	Section B.
W. H. Dall,	A. H. Tuttle,	Alex. Winchell, ²	E. B. Elliott,	F. W. Putnam,	Wm. Saunders,	J. R. Eastman,	H. T. Eddy,	C. S. Hastings,
W. J. Beal,	J. D. Cox,	O. T. Mason,	F. B. Hough,	F. W. Putnam,	J. R. Eastman,	Alfred Springer,	G. W. Hough, ⁸	F. E. Nipher, ⁹
E. D. Cope,	T. G. Wormley,	E. S. Morse,	John Eaton,	F. W. Putnam,	Alfred Springer,	E. S. Holden,	G. W. Hough,	N. D. C. Hodges,

SECRETARIES OF THE SECTIONS.							Treasurer.
Section C.	Section D.	Section E.	Section F.	Section G.	Section H.	Section I.	
Alfred Springer,	J. B. Webb, ³	H. S. Williams, ⁴	Wm. Osler, ⁵	Robt. Brown, jr.,	O. T. Mason,	F. B. Hough, ⁶	_____*
J. W. Langley, ¹⁰	J. B. Webb, ¹¹	A. A. Julien,	S. A. Forbes,	Carl Seiler,	G. H. Perkins,	Jos. Cummings,	William Lilly.
R. B. Warder,	J. B. Webb,	E. A. Smith,	C. E. Bessey,	R. Hitchcock,	W. H. Holmes,	C. W. Smiley,	William Lilly.

¹In the absence of William Harkness. ⁵In the absence of C. S. Minot.
²In the absence of Daniel Wilson. ⁶F. B. Hough was called home and J. R. Dodge acted at the close of the meeting.
³In the absence of C. B. Dudley. ⁷Absent but place was not filled.
⁴In the absence of C. E. Dutton. ⁸Deceased.

⁹In the absence of W. W. Johnson.
¹⁰W. M. McMurne, last three days of meeting.
¹¹Pro tempore.

COMMONWEALTH OF MASSACHUSETTS.

IN THE YEAR ONE THOUSAND EIGHT HUNDRED AND SEVENTY-FOUR.

AN ACT

TO INCORPORATE THE "AMERICAN ASSOCIATION FOR THE
ADVANCEMENT OF SCIENCE."

Be it enacted by the Senate and House of Representatives, in General Court assembled, and by the authority of the same, as follows :

SECTION 1. Joseph Henry of Washington, Benjamin Pierce of Cambridge, James D. Dana of New Haven, James Hall of Albany, Alexis Caswell of Providence, Stephen Alexander of Princeton, Isaac Lea of Philadelphia, F. A. P. Barnard of New York, John S. Newberry of Cleveland, B. A. Gould of Cambridge, T. Sterry Hunt of Boston, Asa Gray of Cambridge, J. Lawrence Smith of Louisville, Joseph Lovering of Cambridge and John LeConte of Philadelphia, their associates, the officers and members of the Association, known as the "American Association for the Advancement of Science," and their successors, are hereby made a corporation by the name of the "American Association for the Advancement of Science," for the purpose of receiving, purchasing, holding and conveying real and personal property, which it now is, or hereafter may be, possessed of, with all the powers and privileges, and subject to the restrictions, duties and liabilities set forth in the general laws which now or hereafter may be in force and applicable to such corporations.

SECTION 2. Said corporation may have and hold by purchase, grant, gift or otherwise, real estate not exceeding one hundred thousand dollars in value, and personal estate of the value of two hundred and fifty thousand dollars.

SECTION 3. Any two of the corporators above named are hereby authorized to call the first meeting of the said corporation in the month of August next ensuing, by notice thereof "by mail," to each member of the said Association.

SECTION 4. This act shall take effect upon its passage.

HOUSE OF REPRESENTATIVES, March 10, 1874.

Passed to be enacted,

JOHN E. SANFORD, *Speaker*.

IN SENATE, March 17, 1874.

Passed to be enacted,

GEO. B. LORING, *President*.

March 19, 1874.

Approved,

W. B. WASHBURN.

SECRETARY'S DEPARTMENT,

Boston, April 3, 1874.

A true copy, Attest:

DAVID PULSIFER,

Deputy Secretary of the Commonwealth.

CONSTITUTION

OF THE

AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE.

Incorporated by Act of the General Court of the Commonwealth of Massachusetts.

OBJECTS.

ARTICLE 1. The objects of the Association are, by periodical and migratory meetings, to promote intercourse between those who are cultivating science in different parts of America, to give a stronger and more general impulse and more systematic direction to scientific research, and to procure for the labors of scientific men increased facilities and a wider usefulness.

MEMBERS, FELLOWS, PATRONS AND HONORARY FELLOWS.

ART. 2. The Association shall consist of Members, Fellows, Patrons, and Honorary Fellows.

ART. 3. Any person may become a Member of the Association upon recommendation in writing by two members or fellows, nomination by the Standing Committee, and election by a majority of the members and fellows present in General Session.

ART. 4. Fellows shall be nominated by the Standing Committee from such of the members as are professionally engaged in science, or have by their labors aided in advancing science. The election of fellows shall be by ballot and a majority vote of the members and fellows present in General Session.

ART. 5. Any person paying to the Association the sum of one thousand dollars shall be classed as a Patron, and shall be entitled to all the privileges of a member and to all its publications.

ART. 6. Honorary Fellows of the Association, not exceeding three for each section, may be elected; the nominations to be made by the Standing Committee and approved by ballot in the respective sections before election by ballot in General Session. Honorary Fellows shall be entitled to all the privileges of fellows and shall be exempt from all fees and assessments, and entitled to all publications of the Association issued after the date of their election.

ART. 7. The name of any member or fellow two years in arrears for annual dues shall be erased from the list of the Association, provided that two notices of indebtedness, at an interval of at least three months, shall have been given; and no such person shall be restored until he has paid his arrearages or has been reëlected. The Standing Committee shall have power to exclude from the Association any member or fellow, on satisfactory evidence that said member or fellow is an improper person to be connected with the Association, or has in the estimation of the Committee made improper use of his membership or fellowship.

ART. 8. No member or fellow shall take part in the organization of, or hold office in, more than one section at any one meeting.

OFFICERS.

ART. 9. The Officers of the Association shall be elected by ballot in General Session from the fellows, and shall consist of a President, a Vice President from each section, a Permanent Secretary, a General Secretary, an Assistant General Secretary, a Treasurer, and a Secretary of each Section; these, with the exception of the Permanent Secretary, shall be elected at each meeting for the following one, and, with the exception of the Treasurer and the Permanent Secretary, shall not be reëligible for the next two meetings. The term of office of Permanent Secretary shall be five years.

ART. 10. The President, or, in his absence, the senior Vice President present, shall preside at all General Sessions of the Association and at all meetings of the Standing Committee. It shall also be the duty of the President to give an address at a General Session of the Association at the meeting following that over which he presided.

ART. 11. The Vice Presidents shall be the chairmen of their respective Sections, and of their Sectional Committees, and it shall be part of their duty to give an address, each before his own section, at such time as the Standing Committee shall determine. The Vice Presidents may appoint temporary chairmen to preside over the sessions of their sections, but shall not delegate their other duties. The Vice Presidents shall have seniority in order of their continuous membership in the Association.

ART. 12. The General Secretary shall be the Secretary of all General Sessions of the Association, and shall keep a record of the business of these sessions. He shall receive the records from the Secretaries of the

Sections, which, after examination, he shall transmit with his own records to the Permanent Secretary within two weeks after the adjournment of the meeting. He shall receive proposals for membership and bring them before the Standing Committee.

ART. 13. The Assistant General Secretary shall be the Secretary of the Standing Committee. He shall give to the Secretary of each Section the titles of papers assigned to it by the Standing Committee.

ART. 14. The Permanent Secretary shall be the executive officer of the Association under the direction of the Standing Committee. He shall attend to all business not specially referred to committees nor otherwise constitutionally provided for. He shall keep an account of all business that he has transacted for the Association, and make annually a general report for publication in the annual volume of Proceedings. He shall attend to the printing and distribution of the annual volume of Proceedings, and all other printing ordered by the Association. He shall issue a circular of information to members and fellows at least three months before each meeting, and shall, in connection with the Local Committee, make all necessary arrangements for the meetings of the Association. He shall provide the Secretaries of the Association with such books and stationery as may be required for their records and business, and shall provide members and fellows with such blank forms as may be required for facilitating the business of the Association. He shall collect all assessments and admission fees, and notify members and fellows of their election, and of any arrearages. He shall receive, and bring before the Standing Committee, the titles and abstracts of papers proposed to be read before the Association. He shall keep an account of all receipts and expenditures of the Association, and report the same annually at the first meeting of the Standing Committee, and shall pay over to the Treasurer such unexpended funds as the Standing Committee may direct. He shall receive and hold in trust for the Association all books, pamphlets and manuscripts belonging to the Association, and allow the use of the same under the provisions of the Constitution and the orders of the Standing Committee. He shall receive all communications addressed to the Association during the interval between meetings, and properly attend to the same. He shall at each meeting report the names of fellows and members who have died since the preceding meeting. He shall be allowed a salary which shall be determined by the Standing Committee, and may employ one or more clerks at such compensation as may be agreed upon by the Standing Committee.

ART. 15. The Treasurer shall invest the funds received by him in such securities as may be directed by the Standing Committee. He shall annually present to the Standing Committee an account of the funds in his charge. No expenditure of the principal in the hands of the Treasurer shall be made without a unanimous vote of the Standing Committee, and no expenditure of the income received by the Treasurer shall be made without a two-thirds vote of the Standing Committee.

ART. 16. The Secretaries of the Sections shall keep the records of their respective sections, and, at the close of the meeting, give the same, including the records of subsections, to the General Secretary. They shall also be the Secretaries of the Sectional Committees. The Secretaries shall have seniority in order of their continuous membership in the Association.

ART. 17. In case of a vacancy in the office of the President, one of the Vice Presidents shall be elected by the Standing Committee as the President of the meeting. Vacancies in the offices of Vice President, Permanent Secretary, General Secretary, Assistant General Secretary, and Treasurer, shall be filled by nomination of the Standing Committee and election by ballot in General Session. A vacancy in the office of Secretary of a Section shall be filled by nomination and election by ballot in the Section.

ART. 18. The Standing Committee shall consist of the past Presidents, and the Vice Presidents of the last meeting, together with the President, the Vice Presidents, the Permanent Secretary, the General Secretary, the Assistant General Secretary, the Secretaries of the Sections, and the Treasurer of the current meeting, with the addition of one fellow elected from each Section by ballot on the first day of its meeting. The members present at any regularly called meeting of the Committee, provided there are at least five, shall form a quorum for the transaction of business. The Standing Committee shall meet on the day preceding each annual meeting of the Association, and arrange the programme for the first day of the sessions. The time and place of this first meeting shall be designated by the Permanent Secretary. Unless otherwise agreed upon, regular meetings of the Committee shall be held in the committee room at 9 o'clock, A.M., on each day of the meeting of the Association. Special meetings of the Committee may be called at any time by the President. The Standing Committee shall be the board of supervision of the Association, and no business shall be transacted by the Association that has not first been referred to, or originated with, the Committee. The Committee shall receive and assign papers to the respective sections; examine and, if necessary, exclude papers; decide which papers, discussions and other

proceedings shall be published, and have the general direction of the publications of the Association; manage the financial affairs of the Association; arrange the business and programmes for General Sessions; suggest subjects for discussion, investigation or reports; nominate members and fellows; and receive and act upon all invitations extended to the Association and report the same at a General Session of the Association.

ART. 19. The Nominating Committee shall consist of the Standing Committee, and one member or fellow elected by each of the Sections. It shall be the duty of this Committee to meet at the call of the President and nominate the general officers for the following meeting of the Association. It shall also be the duty of this Committee to recommend the time and place for the next meeting. The Vice President and Secretary of each Section shall be recommended to the Nominating Committee by a sub-committee consisting of the Vice President, Secretary, and three members or fellows elected by the Section.

MEETINGS.

ART. 20. The Association shall hold a public meeting annually, for one week or longer, at such time and place as may be determined by vote of the Association, and the preliminary arrangements for each meeting shall be made by the Local Committee, in conjunction with the Permanent Secretary and such other persons as the Standing Committee may designate.

ART. 21. General Sessions shall be held at 10 o'clock, A. M., unless otherwise ordered, on every day of the meeting, Sunday excepted, and at such other times as may be appointed by the Standing Committee.

SECTIONS AND SUBSECTIONS.

ART. 22. The Association shall be divided into nine Sections, namely:—A, *Mathematics and Astronomy*; B, *Physics*; C, *Chemistry, including its application to agriculture and the arts*; D, *Mechanical Science*; E, *Geology and Geography*; F, *Biology*; G, *Histology and Microscopy*; H, *Anthropology*; I, *Economic Science and Statistics*. The Standing Committee shall have power to consolidate any two or more Sections temporarily, and such consolidated Sections shall be presided over by the senior Vice President and Secretary of the Sections comprising it.

ART. 23. Immediately on the organization of a Section there shall be three fellows elected by ballot after open nomination, who, with the Vice President and Secretary, shall form its Sectional Committee. The Sectional Committees shall have power to fill vacancies in their own numbers. Meetings of the Sections shall not be held at the same time with a General Session.

ART. 24. The Sectional Committee of any Section may at its pleasure form one or more temporary Subsections, and may designate the officers thereof. The Secretary of a Subsection shall, at the close of the meeting, transmit his records to the Secretary of the Section.

ART. 25. A paper shall not be read in any Section nor Subsection until it has been received from the Standing Committee and placed on the programme of the day by the Sectional Committee.

SECTIONAL COMMITTEES.

ART. 26. The Sectional Committees shall arrange and direct the business of their respective Sections. They shall prepare the daily programmes and give them to the Permanent Secretary for printing at the earliest moment practicable. No titles of papers shall be entered on the daily programmes except such as have passed the Standing Committee. No change shall be made in the programme for the day in a Section without the consent of the Sectional Committee. The Sectional Committees may refuse to place the title of any paper on the programme; but every such title, with the abstract of the paper or the paper itself, must be returned to the Standing Committee with the reasons why it was refused.

ART. 27. The Sectional Committees shall examine all papers and abstracts referred to the sections, and they shall not place on the programme any paper inconsistent with the character of the Association; and to this end they have power to call for any paper, the character of which may not be sufficiently understood from the abstract submitted.

PAPERS AND COMMUNICATIONS.

ART. 28. All members and fellows must forward to the Permanent Secretary, as early as possible, and when practicable before the convening of the Association, full titles of all the papers which they propose to present during the meeting, with a statement of the time that each will occupy in delivery, and also such abstracts of their contents as will give a general idea of their nature; and no title shall be referred by the Standing Committee to the Sectional Committee until an abstract of the paper or the paper itself has been received.

ART. 29. If the author of any paper be not ready at the time assigned, the title may be dropped to the bottom of the list.

ART. 30. Whenever practicable, the proceedings and discussions at General Sessions, Sections and Subsections shall be reported by professional reporters, but such reports shall not appear in print as the official reports of the Association unless revised by the Secretaries.

PRINTED PROCEEDINGS.

ART. 31. The Permanent Secretary shall have the Proceedings of each meeting printed in an octavo volume as soon after the meeting as possible, beginning one month after adjournment. Authors must prepare their papers or abstracts ready for the press and forward them to the Permanent Secretary within this interval, otherwise only the abstracts or titles taken from the "title blanks" will appear in the printed volume. The Standing Committee shall have power to order the printing of any paper by abstract or title only. Whenever practicable, proofs shall be forwarded to authors for revision. If any additions or substantial alterations are made by the author of a paper after its submission to the Secretary, the same shall be distinctly indicated. Illustrations must be provided for by the authors of the papers, or by a special appropriation from the Standing Committee. Immediately on publication of the volume, a copy shall be forwarded to every member and fellow of the Association who shall have paid the assessment for the meeting to which it relates, and it shall also be offered for sale by the Permanent Secretary at such price as may be determined by the Standing Committee. The Standing Committee shall also designate the institutions to which copies shall be distributed.

LOCAL COMMITTEE.

ART. 32. The Local Committee shall consist of persons interested in the objects of the Association and residing at or near the place of the proposed meeting. It is expected that the Local Committee, assisted by the officers of the Association, will make all essential arrangements for the meeting, and issue a circular giving necessary particulars, at least one month before the meeting.

LIBRARY OF THE ASSOCIATION.

ART. 33. All books and pamphlets received by the Association shall be in the charge of the Permanent Secretary, who shall have a list of the same printed and shall furnish a copy to any member or fellow on application. Members and fellows who have paid their assessments in full shall be allowed to call for books and pamphlets, which shall be delivered to them at their expense, on their giving a receipt agreeing to make good any loss or damage and to return the same free of expense to the Secretary at the time specified in the receipt given. All books and pamphlets in circulation must be returned at each meeting. Not more than five books, including volumes, parts of volumes, and pamphlets, shall be held at one time by any member or fellow. Any book may be withheld from circulation by order of the Standing Committee.

ADMISSION FEE AND ASSESSMENTS.

ART. 34. The admission fee for members shall be five dollars in addition to the annual assessment. On the election of any member as a fellow an additional fee of two dollars shall be paid.

ART. 35. The annual assessment for members and fellows shall be three dollars.

ART. 36. Any member or fellow who shall pay the sum of fifty dollars to the Association, at any one time, shall become a Life Member and as such shall be exempt from all further assessments, and shall be entitled to the Proceedings of the Association. All money thus received shall be invested as a permanent fund, the income of which shall be used only to assist in original research, unless otherwise directed by unanimous vote of the Standing Committee.

ART. 37. All admission fees and assessments must be paid to the Permanent Secretary, who shall give proper receipts for the same.

ACCOUNTS.

ART. 38. The accounts of the Permanent Secretary and of the Treasurer shall be audited annually, by Auditors appointed by the Standing Committee.

ALTERATIONS OF THE CONSTITUTION.

ART. 39. No part of this Constitution shall be amended or annulled, without the concurrence of three-fourths of the members and fellows present in General Session, after notice given at a General Session of a preceding meeting of the Association.

ORDER OF PROCEEDINGS IN ORGANIZING A MEETING.

1. The retiring President introduces the President elect, who takes the chair.
 2. Formalities of welcome of the Association as may be arranged by the Local Committee.
 3. Report of the list of papers entered and their reference to the Sections.
 4. Other reports.
 5. Announcements of arrangements by the Local Committee.
 6. Election of members.
 7. Election of fellows.
 8. Unenumerated business.
 9. Adjournment to meet in Sections.
- This order, so far as applicable, to be followed in subsequent General Sessions.

MEMBERS
OF THE
AMERICAN ASSOCIATION
FOR THE
ADVANCEMENT OF SCIENCE.¹

PATRON.²

Thompson, Mrs. Elizabeth, Stamford, Conn. (22).
LILLY, GEN. WILLIAM, Mauch Chunk, Carbon Co., Pa. (28).
HERRMAN, MRS. ESTHER, 59 West 56th St., New York, N. Y. (29).

MEMBERS.³

Abbot, S. L., M. D., 90 Mt. Vernon St., Boston, Mass. (29).
Abbott, E. K., M. D., Salinas, Monterey Co., Cal. (29).
Abert, Col. James W., Newport, Ky. (31).
Abert, S. Thayer, 1907 Pennsylvania Avenue, Washington, D. C. (30).
Acker, E. O'C., Ass't Eng'r, U. S. N., Norristown, Pa. (28).
Adams, Frank, 41 McGill College Avenue, Montreal, Can. (29).
Adams, John S., M. D., Oakland, Cal. (29).
Adams, Julius W., 155 Congress St., Brooklyn, N. Y. (29).
Adams, Capt. Robert C., Montreal, Can. (31).
Agard, Dr. A. H., 1259 Alice St., Oakland, Alameda Co., Cal. (28).
Agnew, Dr. Cornelius R., 266 Madison Ave., New York, N. Y. (32).
Ainslie, Charles N., Rochester, Minn. (32).
Allen, Edmund T., 404 Market St., St. Louis, Mo. (27).

¹The numbers in parentheses indicate the meeting at which the member was elected. The Constitution requires that the names of all members two or more years in arrears shall be omitted from the list, but their names will be restored on payment of arrearages. Members not in arrears are entitled to the annual volume of Proceedings bound in paper. *The payment of ten dollars at one time entitles a member to the subsequent volumes bound in cloth, or by the payment of twenty dollars, to the volumes bound in half morocco.*

²Persons contributing one thousand dollars or more to the Association are classed as Patrons, and are entitled to the privileges of members and to the publications.

The names of Patrons are to remain permanently on the list.

³Any Member or Fellow may become a Life Member by the payment of fifty dollars. The money derived from Life Memberships is invested as a fund, the income of which is to be used only to aid in original research. Life Members are exempt from the annual assessment, and are entitled to the annual volume. The names of Life Members are printed in small capitals in the regular list of Members and Fellows.

- Allen, Dr. G. M., 102 Clark St., Cincinnati, Ohio (30).
 Allen, J. M., Hartford, Conn. (22).
 Alling, J. C., Hasbrouck Institute, 109 Grand St., Jersey City, N. J. (31).
 Alling, Miss Mary R., Acra, Greene Co., N. Y. (29).
 Allis, Solon M., Tucson, Arizona (29).
 Allison, Henry, Fort Worth, Texas (32).
 Ammen, Daniel, Rear Admiral U. S. Navy, Washington, D. C. (26).
 Anderson, Newton M., Columbus, Ohio (30).
 Andrews, L. W., Ph. D., Springfield, Mass. (31).
 Ansley, Clark F., Swedona, Mercer Co., Ill. (32).
 Appleton, Rev. Edw. W., D.D., Ashbourne P. O., Montgomery Co., Pa. (28).
 Apthorp, Henry, Ashtabula, Ohio (32).
 Archambault, U. E., P. O. Box 1944, Montreal, Can. (31).
 Armstrong, Lucius H., St. Nicholas, Duval Co., Fla. (30).
 Armstrong, Mrs. Lucius H., St. Nicholas, Duval Co., Fla. (30).
 Arnold, Lauren B., Rochester, N. Y. (30).
 Ashmead, Wm. H., Jacksonville, Fla. (29).
 Atkinson, Jno. B., Earlington, Hopkins Co., Ky. (26).
 Atwater, Richard M., Millville, N. J. (29).
 Atwood, E. S., East Orange, N. J. (29).
 Atwood, Oscar, Rutland, Vt. (31).
 Auchincloss, Wm. S., 209 Church St., Philadelphia, Pa. (29).
 Aughey, Prof. Samuel, Univ. of Nebraska, Lincoln, Neb. (29).
 Austin, Miss Mary, Mattapan Station, Milton, Mass. (31).
 Ayres, Prof. Brown, Univ. of Louisiana, New Orleans, La. (31).
 Ayres, Dr. S. C., 64 W. 7th St., Cincinnati, Ohio (30).
- Babbit, John, Fredericton, N. B. (29). [(32).
 Babbitt, Miss Franc E., P. O. Box 75, Little Falls, Morrison Co., Minn.
 Bailey, E. H. S., Bethlehem, Pa. (25).
 Baker, A. L., 32 So. Charles St., Baltimore, Md. (30).
 Baker, B. N., 32 So. Charles St., Baltimore, Md. (30).
 Baker, Frank, M. D., 326 C St., Washington, D. C. (31).
 Baker, Prof. I. O., Illinois Industrial Univ., Champaign, Ill. (30).
 Baker, Prof. T. R., Millersville, Lancaster Co., Pa. (22).
 Baker, Wm. E., 158 Tremont St., Boston, Mass. (29).
 Baldwin, Miss Mary A., Summer Ave., Cor. Kearney St., Newark, N. J. (31).
 Baldwin, Very Rev. Dean Maurice S., Montreal, Can. (31).
 Balen, Abraham D., Plainfield, N. J. (31).
 Ballard, H. H., Lenox, Mass. (31).
 Ballou, Nahum E., M. D., Sandwich, Ill. (29).
 Ballou, Wm. H., 105 Dearborn Avenue, Chicago, Ill. (29).
 Banes, Charles H., 2416 Spring Garden St., Philadelphia, Pa. (31).
 Baptie, George, Normal School, Ottawa, Ontario, Can. (29).

- Barclay, Robert, M. D., 14 Fifth Ave., New York, N. Y. (30).
Bardeen, Francis L., M. D., Washington College, Chestertown, Md. (32).
Barker, Mrs. Martha M., care of H. R. Barker, 8 and 10 Central St., Lowell, Mass. (31).
Barnard, Jas. M., Hotel Vendôme, Boston, Mass. (18).
Barnes, Charles J. (27).
Barrows, Nathan, M. D., Hartford, Conn. (29).
Bartlett, Arthur K., Battle Creek, Mich. (29).
Bartlett, Dr. Homer L., Flatbush, L. I. (28).
Bassett, Daniel A., Crawfordsville, Ind. (29).
Bassett, George W., M.D., Vandalia, Ill. (20).
BASSNETT, THOMAS, Box 936, Jacksonville, Fla. (8).
Bassnett, Mrs. Thomas, Box 936, Jacksonville, Fla. (24).
Bastian, Dr. David I., Clinton, Worcester Co., Mass. (25).
Bastin, Prof. E. S., Univ. of Chicago, Chicago, Ill. (29).
Batchelor, Charles, Electrician, Menlo Park, N. J. (28).
Batterson, J. G., Hartford, Conn. (23).
Bayne, Prof. Herbert A., Royal Military College, Kingston, Ont. (29).
Beach, Charles M., Merchant, Hartford, Conn. (23).
Beach, J. Watson, Merchant, Hartford, Conn. (23).
Beach, William H., Beloit, Wis. (21).
Beadle, Delos W., St. Catharines, Ontario, Can. (31).
Beal, F. E. L., Agricultural College, Ames, Iowa (29).
Beall, Thomas, Lindsay, Ontario, Can. (31).
Beamer, Miles (30).
Bean, Thos. E., Box 441, Galena, Ill. (28).
Beard, Richard O., M. D., Minneapolis, Minn. (32).
Beaudry, J. Alphonse U., 97 St. James St., Montreal, Can. (31).
Beauregard, Gen. Gustave T., New Orleans, La. (30).
Bechdolt, Adolphus F., Mankato, Minn. (32).
Beckwith, Henry C., Passed Ass't Eng'r U. S. N., Coleman's Station, N. Y. (29).
Beebe, Wm. S., Brevet Major, U. S. Army, 25 Grace Court, Brooklyn, N. Y. (30).
Belknap, Chas., Lieut. U. S. N., U. S. S. Vandalia, care Navy Dept., Washington, D. C. (29).
Belknap, Morris B., Louisville, Ky. (29).
Belknap, Wm. B., Louisville, Ky. (29).
Bell, Alex. Melville, 88 Fayette St., Georgetown, D. C. (31).
Bell, John J., Exeter, N. H. (22).
Bell, Thomas D., McGill College, Montreal, Can. (31).
Bemis, Hon. A. S., President of the Common Council, Buffalo, N. Y. (25).
Bemrose, Joseph, 158 P. O., Montreal, Can. (31).
Benjamin, E. B., 6 Barclay St., New York, N. Y. (19).
Benjamin, Marcus, 43 East 67th St., New York, N. Y. (27).
Berliner, Emile, 95 Milk St., Boston, Mass. (29).
Best, W. F., St. John, N. B. (29).

- Beyer, H. G., Passed Ass't Surgeon, U. S. N., care Bureau of Med. and Surg., Navy Dep't, Washington, D. C. (31).
- Bickmore, Mrs. Albert S., 12 East 41st St., New York, N. Y. (31).
- Bicknell, Hon. Thos. W., Boston, Mass. (29).
- Bierstadt, Albert, Brevoort House, New York, N. Y. (28).
- Bigelow, A. T., D. D. S., Bismarck, Dakota (32).
- Bigelow, Otis, 605 7th St., Washington, D. C. (30).
- Bigelow, Robert P., 1501 18th St., N. W., Washington, D. C. (32).
- Bigelow, Wm. Sturgis, M. D., 61 Beacon St., Boston, Mass. (29).
- Bill, Charles, Springfield, Mass. (17).
- Bingham, Mrs. Martha A., Kansas City, Mo. (32).
- Birge, Charles P., Keokuk, Iowa (29).
- Blackford, Eugene G., 809 Bedford Avenue, Brooklyn, N. Y. (29).
- Blackwell, Mrs. A. B., Elizabeth, N. J. (30).
- Blaisdell, F. E., Poway, San Diego Co., Cal. (29).
- Blake, Mrs. Clarence J., 19 St. James Avenue, Boston, Mass. (29).
- Blake, Francis C., Mansfield Valley P. O., Allegheny Co., Pa. (29).
- Blake, Prof. John R., Davidson College, N. C. (29).
- Blaklee, Prof. T. M., Hamilton, N. Y. (31).
- Blatchford, Eliphalet W., 375 North La Salle St., Chicago, Ill. (17).
- Blatchford, John S., 13 Exchange St., Boston, Mass. (29).
- Blitz, Adolph, M.D., Minneapolis, Minn. (32).
- Blodgett, A. N., M.D., Boylston St., Boston, Mass. (29).
- Blount, Henry F., Evansville, Vanderburg Co., Ind. (32).
- Boardman, Miss E. D., 120 Beacon St., Boston, Mass. (29).
- Boardman, Mrs. Wm. D., 38 Kenilworth St., Roxbury, Mass. (28).
- Bobbitt, Mrs. John, Greensburg, Decatur Co., Ind. (30).
- Boerner, Chas. G., Vevay, Ind. (29).
- Bond, Geo. W., Boston, Mass. (29).
- Bookwalter, J. W., Springfield, Ohio (30).
- Bourland, Dr. Addison M., Van Buren, Ark. (29).
- Bowditch, Frederic C., Box 615, Brookline, Mass. (29).
- Bowers, Miss Virginia K., Appeal Office, Memphis, Tenn. (27).
- Bowker, W. H., 43 Chatham St., Boston, Mass. (30).
- Bowles, George J., 1466 St. Catherine St., Montreal, Can. (31).
- Bowles, Miss Margaretta, The Institute, Columbia, Tenn. (26).
- Boyd, William, Cambridge, Mass. (29).
- Boynton, Miss S. P., Box 150, Lynn, Mass. (19).
- Brackett, John W., 581 Washington St., Boston, Mass. (29).
- Brackett, Solomon H., St. Johnsbury, Vt. (29).
- Bradford, Edward H., M.D., 150 Boylston St., Boston, Mass. (29).
- Bradford, Royal B., Lt. Comd'r, U. S. N., 21 Brinley St., Newport, R. I. (31).
- Bradley, C. W., cor. 3rd and Walnut streets, Cincinnati, Ohio (27).
- Bragg, Everett B., No. 3 Park Place, New York, N. Y. (29).
- Brainerd, Thos. C., P. O. Box 720, Montreal, Can. (31).
- Brandegge, T. S., Berlin, Conn. (29).

- Branlette, Mrs. T. E., Louisville, Ky. (29).
Branstrup, Dr. W. T., Vincennes, Ind. (30).
Bray, Prof. C. D., College Hill, Mass. (29).
Breckinridge, S. M., P. O. Box 2794, St. Louis, Mo. (27).
Brewster, William, 61 Sparks St., Cambridge, Mass. (29).
Brice, Judge Albert G., New Orleans, La. (32).
Bringhurst, Prof. W. L., Agric. and Mechan. Coll. of Texas, College Station, Brazos Co., Texas (32).
Brissette, Milton H., Montreal, Can. (31).
Bronnson, W. H., Lt. Comd'r U. S. N., Yonkers, N. Y. (31).
Bronson, E. H., Ottawa, Ontario, Can. (31).
Brooks, Miss Margarette W., Salem, Mass. (29).
Broomall, Hon. John M., Media, Delaware Co., Pa. (23).
Brounell, Prof. Walter A., 725 Irving St., Syracuse, N. Y. (30).
Brown, Miss Anna, 528 West 7th St., Cincinnati, Ohio (31).
Brown, Arthur, C. E., Oakland, Alameda Co., Cal. (31).
Brown, Asa Warren, Newport, Ky. (30).
Brown, Mrs. Ashley, 115 Wilkinson St., Dayton, Ohio (25).
Brown, Prof. C. J., Randolph, N. Y. (31).
Brown, Fred. G., care of McKesson and Robbins, 93 Fulton St., New York, N. Y. (31).
Brown, Hon. John C., Vice President, Texas and Pacific R. R. Co., Pulaski, Tenn. (26).
Brown, Jonathan, 390 Broadway, Somerville, Mass. (29).
Brühl, Gustav, N. W. cor. John and Hopkins Sts., Cincinnati, Ohio (28).
Bryant, Wm. S., 61 Beacon St., Boston, Mass. (30).
Buck, C. Elton, Wilmington, Del. (29).
Buck, Henry C., West Somerville, Mass. (29).
Buckingham, Chas. L., U. S. Patent Office, Washington, D. C. (28).
Buffum, Miss Fannie A., Linden, Mass. (29).
Bull, John, Room 30, Corcoran Building, Washington, D. C. (31).
Bulloch, Walter H., 99 W. Monroe St., Chicago, Ill. (30).
Burdick, Edson A., 408 Spruce St., Le Droit Park, Washington, D. C. (30).
Burke, Jos. C., Lasell Seminary, Auburndale, Mass. (29).
Burke, William, U. S. Patent Office, Washington, D. C. (28).
Burland, Jeffrey H., Montreal, Can. (31).
Burns, Prof. James A., Box 456, Atlanta, Ga. (32).
Burpee, J. P. C., St. John, N. B. (30).
Bush, Rev. Stephen, D. D., Waterford, N. Y. (19).
Butcher, Mrs. Z. D., Washington, D. C. (29).
Butler, A. W., Brookville, Franklin Co., Ind. (30).
Butler, Cyrus, 24 Cliff St., New York, N. Y. (29).
Butler, Nathan, 17 Johnston Block, Minneapolis, Minn. (32).
Butterfield, W. Webster, M. D., Indianapolis, Ind. (32).
Bynner, Edwin L., 13 Pemberton Square, Boston, Mass. (29).

Byrnes, R. M., M. D., cor. 5th and Race Sts., Cincinnati, Ohio (30).

Cabot, Sam'l, jr., 53 Kilby St., Boston, Mass. (29).

Calder, Edwin E., Box 17, Providence, R. I. (29).

Caldwell, Albert G., Lt. Comd'r U. S. N., Torpedo Station, Newport, R. I. (31).

Caldwell, Dr. Frank, Cincinnati Hospital, Cincinnati, Ohio (30).

Calkins, Dr. Marshall, Springfield, Mass. (29).

Campbell, Rev. Prof. John, Presbyterian College, Montreal, Can. (31).

Canfield, Rev. Eli H., D.D., Arlington, Bennington Co., Vt. (25).

Capen, Miss Bessie T., Northampton, Mass. (23).

Cargill, H. L., Montreal, Can. (31).

Carman, Ezra A., Dept. of Agric., Washington, D. C. (30).

Carman, Lewis, Bangall, N. Y. (29).

Caron, C. K., Louisville, Ky. (30).

Carpenter, Geo. O., jr., care St. Louis Lead & Oil Co., St. Louis, Mo. (29).

Carpenter, Louis G., Lansing, Mich. (32).

Carrington, Col. Henry B., U. S. A., care Adj. Gen. U. S. A., Washington, D. C. (20).

Case, Mrs. Fidelia O., Kansas City, Mo. (32).

Cassino, S. E., Naturalists' Agency, 41 Arch St., Boston, Mass. (25).

Castle, Frederick A., M. D., 102 East 57th St., New York, N. Y. (29).

Castner, Dr. H. Y., 197 Pearl St., New York, N. Y. (30).

Caswell, John H., 11 West 48th Street, New York, N. Y. (26).

Chabert, L'Abbé Joseph, 80 St. Gabriel St., Montreal, Can. (31).

Chace, Arnold B., Valley Falls, R. I. (29).

Chadbourn, Erlon R., Lewiston, Me. (29).

Chadwick, James R., M. D., Clarendon St., Boston, Mass. (29).

Chamberlain, M., St. John, N. B. (32).

Chance, H. Martyn, 2433 Fairmount Avenue, Philadelphia, Pa. (29).

Channing, Dr. Wm. F., Providence, R. I. (29).

Chapman, F. M., Danforth, Iroquois Co., Ill. (17).

Charbonier, Prof. L. H., University of Georgia, Athens, Ga. (26).

Chase, Prof. F. A., Fisk University, Nashville, Tenn. (26).

Chase, Mrs. Mariné J., 1622 Locust St., Philadelphia, Pa. (31).

Chase, Prof. Pliny E., Haverford College, Haverford, Pa. (18).

Chase, R. Stuart, 16 Merrimack St., Haverhill, Mass. (18).

Chatfield, A. F., Albany, N. Y. (29).

Cheesman, Prof. Louis M., Trinity College, Hartford, Conn. (32).

Chenault, Prof. J. W., Louisville, Ky. (30).

Chester, Lt. Com'dr Colby M., U. S. N., Coast Survey Office, Washington, D. C. (28).

Childe, John Healey, Boston, Mass. (31).

Cisco, J. G., Jackson, Tenn. (29).

Clark, John S., 7 Park St., Boston, Mass. (31).

Clark, Simeon T., M.D., Lockport, Niagara Co., N. Y. (25).

- Clarke, Miss Cora H., Jamaica Plain, Mass. (29).
 Clarke, Prof. John M., Northampton, Mass. (31).
 Clarke, Maurice D., 68 Ohio St., East Cambridge, Mass. (29).
 Clarke, Robert, Cincinnati, Ohio (30).
 Cleveland, J. L., 547 W. 8th St., Cincinnati, Ohio (30).
 Clevenger, Dr. S. V., 189 37th St., Chicago, Ill. (29).
 Cloud, Jno. W., Altoona, Pa. (28).
 Coakley, George W., LL.D., Hempstead, L. I. (29).
 Cobb, Samuel C., 235 Boylston St., Boston, Mass. (29).
 Cobb, Rev. Sanford H., Saugerties, N. Y. (29).
 Coe, Henry W., M. D., Mandan, Dakota (32).
 Coffin, Amory, Phoenixville, Pa. (31).
 Coffinberry, W. L., Grand Rapids, Mich. (20).
 Colburn, Richard T., Elizabeth, N. J. (31).
 Colby, C. E., M. E., School of Mines, Columbia College, New York, N. Y. (28).
 Cole, Frederick, 1394 St. Catherine St., Montreal, Can. (31).
 Colie, Edw. M., East Orange, N. J. (30).
 Collier, M. Dwight, St. Louis, Mo. (27).
 Collin, Prof. Alonzo, Cornell College, Mount Vernon, Iowa (21).
 Colman, Henry, M.D., Swampscott, Mass. (25).
 Colton, G. Woolworth, 182 William St., New York, N. Y. (22).
 Compton, Murat, Bradford, McKean Co., Pa. (32).
 Comstock, Dr. T. Griswold, 507 North 14th St., St. Louis, Mo. (29).
 Conger, Rev. Charles L., Morrow, Warren Co., Ohio (30).
 Conklin, W. A., Director Central Park Menagerie, New York, N. Y. (29).
 Conro, Miss Emma O., Keeseville, N. Y. (31).
 Constable, Casimir, Constableville, N. Y. (29).
 Cook, Dr. Charles D., 133 Pacific St., Brooklyn, N. Y. (25).
 Coolidge, Herbert, 48 Kilby St., Boston, Mass. (29).
 Coon, Henry C., M. D., Alfred Centre, N. Y. (29).
 Cooper, Ed. M., 164 Walnut St., Cincinnati, Ohio (30).
 Copes, Dr. Joseph S., New Orleans, La. (11).
 Costin, Rev. M. P., St. Jno. College, Fordham, N. Y. (30).
 Cotting, Dr. B. E., Roxbury, Mass. (31).
 Coulson, Miss Mary, Oxford, Butler Co., Ohio (30).
 Coulter, Prof. John M., Crawfordsville, Ind. (32).
 Couzins, Miss Phoebe W., LL.B., 2647 Washington Ave., St. Louis, Mo. (27).
 Cowan, Richard Wm., 416 Notre Dame St., Montreal, Can. (31).
 Cowdry, Thomas, M. D., Toronto, Can. (31).
 Cox, Hon. Joseph, Madisonville, Ohio (30).
 Crafts, Robert H., 2329 South 6th St., Minneapolis, Minn. (32).
 Cragin, Francis W., Washburn College, Topeka, Kan. (29).
 Crane, C. R., 321 Garrard St., Covington, Ky. (30).

- Crane, Henry L., 157 York St., Cincinnati, Ohio (30).
 Crawford, John M., cor. 7th and Mound Sts., Cincinnati, Ohio (30).
 Crawford, Prof. Morris B., Middletown, Conn. (30).
 Crehore, John D., 1046 Prospect St., Cleveland, Ohio (24).
 Crevier, I. A., M. D., Montreal, Can. (31).
 Crocker, Miss Lucretia, 40 Rutland Square, Boston, Mass. (29).
 Crosby, Francis W., 20 Second St., N. E., Washington, D. C. (31).
 Crosier, Dr. Edward S., Louisville, Ky. (29).
 Crow, Wayman, St. Louis, Mo. (27).
 CROWELL, A. F., Woods Holl, Mass. (30). [(29).
 Crump, M. H., Col. Commanding 3d Reg. K. S. G., Bowling Green, Ky.
 Cummings, John, Woburn, Mass. (18).
 Currier, John McNab, M. D., Castleton, Vt. (28).
 Curtis, Elizabeth, 16 Beethoven St., Egleston Square, Boston, Mass. (31).
 Curtis, Dr. Lester, 1558 Wabash Avenue, Chicago, Ill. (29).
 Curtiss, Abijah, Yonkers, N. Y. (31).
 Cutler, Dr. Andrew S., Kankakee, Ill. (32).
 Cutter, John D., P. O. Box 276, New York, N. Y. (23).
 Cutter, W. E., Box 1037, Worcester, Mass. (29).

 Dale, Ben. B., 25 Wiggins Block, Cincinnati, Ohio (30).
 Dale, T. Nelson, jr., Gibbs Ave., Newport, R. I. (27).
 Dana, Judge Edmund L., 379 South Main St., Wilkesbarré, Pa. (32),
 Daniels, Edward, St. Paul, Minn. (32).
 Dansereau, C. A., Montreal, Can. (31).
 Davenport, H. W. (30).
 Davis, Miss Anna M., 47 York St., Cincinnati, Ohio (30).
 Davis, Miss Carrie, 47 York St., Cincinnati, Ohio (30).
 Davis, Charles C., 58 W. 3d St., Cincinnati, Ohio (30).
 Davis, G. Pierrepont, M. D., Hartford, Conn. (29).
 Davis, J. J., M. D., Racine, Wis. (31).
 Davis, Dr. John, 323 Elm St., Cincinnati, Ohio (30).
 Davis, Dr. John L., 42 York St., Cincinnati, Ohio (30).
 Davis, Leander S., Baker City, Baker Co., Oregon (29).
 Davis, Dr. Wm. B., 310 Elm St., Cincinnati, Ohio (30).
 Davis, Wm. J., Center and Walnut Sts., Louisville, Ky. (29).
 Davison, E. W., Box 126, Baltimore, Md. (30).
 Davison, Geo. W., Box 126, Baltimore, Md. (30).
 Dawson, Miss Sarah M., 50 Sheridan Avenue, Roxbury, Mass. (29).
 Day, Austin G., 126 Broadway, New York, N. Y. (29).
 Day, Mrs. Oliver C., Kansas City, Mo. (29).
 Dayton, L. M., 184 W. 2nd St., Cincinnati, Ohio (31).
 Dean, Dr. D. V., St. Louis, Mo. (27).
 De Beck, Dr. David, Cincinnati, Ohio (30).
 DeCamp, William H., M. D., Grand Rapids, Mich. (21).
 De Forest, Henry S., Talladega, Ala. (32).

- De Hass, Dr. Wills, Bureau of Ethnology, Washington, D. C. (30).
Delano, Joseph C., New Bedford, Mass. (5).
Dempsey, Peter C., Trenton, Ontario, Can. (31).
Denton, John M., London, Ontario, Can. (31).
Devereaux, Willard L., Clyde, Wayne Co., N. Y. (29).
DEVEREUX, J. H., President C.C.C. & I.R.R., Cleveland, Ohio (18).
Dewey, Fred. P., Ph. B., Smithsonian Institution, Washington, D. C. (30).
Dexter, Julius, Cincinnati, Ohio (30).
Dickerman, Alton L., Ph. B., Somerville, Mass. (29).
Dickinson, Dwight, Surgeon U. S. N., Navy Dep't, Washington, D. C. (31).
Dickinson, Rev. John, 219 E. 27th St., New York, N. Y. (29).
Diller, J. Silas, Cambridge, Mass. (29).
Dinsmore, Prof. Thos. H., jr., York, Pa. (29).
Dinwiddie, Prof. Hardaway H., A. and M., College of Texas, College Station, Brazos Co., Texas (32).
Dixwell, Epes S., Cambridge, Mass. (1).
Dixwell, Geo. B., 553 Shawmut Ave., Boston, Mass. (29).
Dodd, Charles W., Mt. Auburn, Cincinnati, Ohio (30).
Dodd, Prof. James W., Vanderbilt Univ., Nashville, Tenn. (30).
Dodge, J. Richards, Washington, D. C. (31).
Dodge, Prof. James A., Minneapolis, Minn. (29).
Dolbear, Mrs. Alice J., College Hill, Mass. (29).
Donnelly, Ignatius, Hastings, Minn. (31).
Doolittle, Prof. C. L., South Bethlehem, Pa. (25).
Doughty, John W., Newburgh, N. Y. (19).
Douglass, Andrew E., 63 Pine St., New York, N. Y. (31).
Dow, Capt. John M., 69 Seventh Ave., New York, N. Y. (31).
Drowne, Prof. Charles, care Wm. L. Drowne, Esq., Canaan Four Corners, N. Y. (6).
Drysdale, William, Montreal, Can. (31).
Du Bois, C. H., Minneapolis, Minn. (31).
Dudley, P. H., 66½ Pine St., New York, N. Y. (29).
Duff, Mrs. W. L. (29).
Dummer, Edward, 19 Tremont Row, Boston, Mass. (31).
Dun, Dr. Walter A., Cincinnati, Ohio (31).
Dunbar, L. L., D. D. S., 23 Kearny St., San Francisco, Cal. (31).
Dunham, Carroll, jr., 98 Boylston St., Boston, Mass. (31).
Dunham, Edw. K., 329 Beacon St., Boston, Mass. (30).
Du Pré, Prof. Daniel A., Spartanburg, S. C. (28).
Durfee, Matthew C., A. B., care Bedford Stone Co., Cleveland, Ohio (30).
Dyche, Dr. D. T. D., Lebanon, Ohio (30).
Dyer, Clarence M., Lawrence, Mass. (22).

Earll, R. E., Waukegan, Ill. (28).
Eastman, Dr. Arthur M., St. Paul, Minn. (32).

- Eaton, Harlow W., Ph. D., Louisville, Ky. (32).
 Eaton, Prof. James R., Liberty, Mo. (29).
 Eccles, Robert G., M. D., 94 Smith St., Brooklyn, N. Y. (31).
 Eddy, C. W., Ware, Mass. (29).
 Eddy, Fred. A., Bangor, Me. (29).
 Edmunds, E. S., Lock Box 46, La Grange, Ind. (29).
 Edwards, J. Baker, Montreal, Can. (31).
 Edwards, J. M., Marlborough, Mass. (29).
 Edwards, J. T., D. D., Randolph, N. Y. (31).
 Edwards, J. W., Delaware Ave. and Green St., Philadelphia, Pa. (32).
 Edwards, Wm. H., Coalburgh, Kanawha Co., W. Va. (30).
 Elder, Mrs. Susan B., New Orleans, La. (32).
 Elliot, Dr. A. F., Minneapolis, Minn. (30).
 Elliott, William, care Riggs & Co., 56 Wall St., New York, N. Y. (30).
 Ellis, Wm. Hodgson, School of Practical Science, Toronto, Canada (25).
 Elmer, H. N., St. Paul, Minn. (32).
 Ely, Theo. N., Supt. Motive Power, Penn. R. R., Altoona, Pa. (29).
 Embick, F. B., Williamsport, Pa. (32).
 Emerson, Lowe, cor. John and Findlay Sts., Cincinnati, Ohio (30).
 Emerson, Samuel, 26 West 43d St., New York, N. Y. (32).
 Emery, Albert H., Stamford, Conn. (29).
 Emmerton, Mrs. W. H., Salem, Mass. (26).
 Endemann, Hermann, Ph. D., 33 Nassau St., New York, N. Y. (26).
 Enos, Alanson T., 28 Monroe Place, Brooklyn, N. Y. (27).
 ESTES, DANA, 301 Washington St., Boston, Mass. (29).
 Evans, Dr. Arthur E., Cincinnati Hospital, Cincinnati, Ohio (30).
 Evans, C. S., care Seth Evans, Clifton, Hamilton Co., Ohio (30).
 Evans, Edwin, M. D., Streator, La Salle Co., Ill. (30).
 Evans, Henry S., Montreal, Can. (31).
 Everhart, J. F., M. D., Zanesville, Ohio (29).
 Evers, Dr. Edw., 1737 North Market St., St. Louis, Mo. (28).
- Failyer, Prof. George H., Manhattan, Kansas (32).
 Fairfield, Frank H., 30 Kilby St., Boston, Mass. (31).
 Falconer, Wm., Botanic Garden, Cambridge, Mass. (29).
 Fallon, John, Lawrence, Mass. (30).
 Fanning, John T., Manchester, N. H. (29).
 Farden, Thomas, Rugby, Tenn. (32).
 Farnam, Charles H., New Haven, Conn. (25).
 Farnam, Prof. J. E., Georgetown College, Georgetown, Ky. (26).
 Farnam, William W., New Haven, Conn. (28).
 Farnsworth, P. J., M. D., Clinton, Iowa (32).
 Farquhar, Edw., Asst. Lib'n, U. S. Patent Office, Washington, D. C. (29).
 Farr, Henry L., Rutland, Vt. (31).
 Farrar, Miss Elizabeth, 62 Lake Ave., Rochester, N. Y. (29).

- Fearing, Clarence W., Mass. Inst. Technology, Boston, Mass. (29).
 Feemster, J. H., 437 Broadway, Cincinnati, Ohio (30).
 Felton, S. M., Box 2126, Philadelphia, Pa. (29).
 Fenwick, A. G., M. D., London, Ontario, Can. (31).
 Fernow, Bernhard E., Slatington, Pa. (31).
 Ferrier, James, jr., 144 Metcalfe St., Montreal, Can. (31).
 Ferrier, Walter F., 144 Metcalfe St., Montreal, Can. (31).
 Fick, H. H., 78 Dayton St., Cincinnati, Ohio (30).
 Fish, Chas., Brunswick, Me. (29).
 Fisher, Chas. H., Sec. State Board of Health, Providence, R. I. (29).
 Fisher, James H., Rochester, N. Y. (29).
 Fisher, Hon. L. C., Galveston, Texas (32).
 Fitch, Dr. W. H., Rockford, Ill. (29).
 Fitz, Prof. Newton, Norfolk, Va. (30).
 Fleming, Sandford, Chancellor of Queen's Univ., Ottawa, Can. (31).
 Fletcher, Chas. R., 22 School St., Boston, Mass. (29).
 Fletcher, Lawrence B., Marlboro', N. Y. (29).
 Fletcher, Dr. M. H., 65 W. 7th St., Cincinnati, Ohio (30).
 Flint, Albert S., U. S. Naval Observatory, Washington, D. C. (30).
 Flint, D. B., Watertown, Mass. (25).
 Flint, Weston, Librarian U. S. Patent Office, Washington, D. C. (28).
 Folger, Lt. Comd'r Wm. M., U. S. N., Care Bureau of Ordnance, Navy
 Dept't, Washington, D. C. (28).
 Forbes, John, C. E., Dartmouth, N. S. (30).
 Force, Cyrus G., jr., Cleveland, Ohio (31).
 Forchheimer, Fred., M. D., 160 W. 9th St., Cincinnati, Ohio (30).
 Forman, Benj. R., New Orleans, La. (30).
 FORTESCUE, MRS. MARION T., 339 West 34th St., New York, N. Y. (31).
 Fosgate, Dr. Blanchard, Auburn, N. Y. (7).
 Foster, Henry, M.D., Clifton, N. Y. (17).
 Foulkes, James F., M. D., Oakland, Alameda Co., Cal. (30).
 Fox, George H., M. D., 18 East 31st St., New York, N. Y. (31).
 Fox, Prof. Joseph G., Easton, Pa. (31).
 Foye, Prof. J. C., Lawrence Univ., Appleton, Wis. (29).
 Freeman, L. R., 274 W. 7th St., Cincinnati, Ohio (30).
 Frey, S. L., Palatine Bridge, Montgomery Co., N. Y. (29).
 Frick, John H., Central Wesleyan College, Warrenton, Mo. (27).
 Frisbie, J. F., M. D., Box 455, Newton, Mass. (29).
 Frisselle, M. M., M. D., Minneapolis, Minn. (32).
 Fritts, Charles E., 42 Nassau St., New York, N. Y. (32).
 Froehling, Dr. Henry (29).
 FROTHINGHAM, REV. FREDERICK, Milton, Mass. (11).
 FROTHINGHAM, MRS. LOIS R., Milton, Mass. (31).
 Fuchs, Julius, 411 W. Court St., Cincinnati, Ohio (30).
 Fuller, Henry W., 17 Pemberton Square, Boston, Mass. (29).
 Fulton, Prof. Robert B., University of Mississippi, Oxford, Miss. (21).
 Fyles, Rev. Thomas W., South Quebec, Can. (31).

- Gaffield, Thomas, Boston, Mass. (29).
Gallaudet, Edw. M., Pres. Nat. Deaf Mute College, Washington, D.C. (28).
Gardiner, Edw. G., Boston Soc. Nat. History, Boston, Mass. (29).
Gardiner, Frederic, jr., Middletown, Conn. (29).
Gardner, Rev. Corliss B., Rochester, N. Y. (29).
Gardner, Joseph, M. D., Bedford, Lawrence Co., Ind. (30).
Garnett, Algernon S., M.D., Hot Springs, Arkansas (23).
Garrison, H. D., 3625 Vincennes Ave., Chicago, Ill. (31).
Garth, Charles, Montreal, Can. (31).
Gattinger, August, M.D., Nashville, Tenn. (26).
Gehring, J. Geo., 363 and 365 Pearl St., Cleveland, Ohio (29).
Genth, Fred. A., jr., 428 South 40th St., West Philadelphia, Pa. (32).
George, Henry, care D. Appleton & Co., New York, N. Y. (29).
George, James N., 40 Pearl St., Boston, Mass. (29).
Geppert, J. P., M. D., 305 Race St., Cincinnati, Ohio (30).
Gest, Mrs. J. J., 114 Dayton St., Cincinnati, Ohio (30).
Geyer, Wm. E., Stevens Inst. Technology, Hoboken, N. J. (29).
Ghequier, A. de, Box 316, Baltimore, Md. (30).
Gianelli, Chev'r A. M. F., Italian Consulate, Montreal, Can. (31).
Giauque, Florian, Cincinnati, Ohio (30).
Gilbert, Benj. D., Utica, N. Y. (31).
Girdwood, Gilbert P., 28 Beaver Hall Terrace, Montreal, Can. (31).
Gissler, Carl F., Ph.D., 63 Broadway, Brooklyn (E. D.), N. Y. (29).
Gladding, Thomas S., Box 1261, New York, N. Y. (30).
Glasgow, Wm., jr., 3016 Glasgow Place, St. Louis, Mo. (27).
Gleeson, Thos. W., 109 Court St., Boston, Mass. (31).
GLENNY, WILLIAM H., JR., Buffalo, N. Y. (25).
Glover, Miss Marie O., 321 Gates Avenue, Brooklyn, N. Y. (29).
Gold, Theodore S., West Cornwall, Conn. (4).
Goldsmith, Edw., 658 North 10th St., Philadelphia, Pa. (29).
Goodnow, Henry R., Johns Hopkins University, Baltimore, Md. (32).
Gordon, Prof. Jos. C., Deaf Mute College, Washington, D. C. (27).
Gordon, Dr. Thos. W., Georgetown, Ohio (30).
Gordon, W. J., Cleveland, Ohio (29).
Gore, James H., Columbian College, Washington, D. C. (29).
Gottschalck, Wilhelm von, M. D., 265 Benefit St., Providence, R. I. (29).
Gould, Dr. B. A., Cordoba, Argentine Republic, S. A. (2).
Gould, Sylvester C., Manchester, N. H. (22).
Graef, Edw. L., 40 Court St., Brooklyn, N. Y. (28).
Graf, Louis, Van Buren, Crawford Co., Ark. (30).
Grafflin, Col. C. L., Wilmington, N. C. (30).
Grant, Angus, Montreal, Can. (31).
Grant, Emory A., Louisville, Ky. (30).
Gratacap, L. P., Ph.B., M. A., American Museum Natural History, Central Park, New York, N. Y. (27).
Gray, Arthur F., Danversport, Mass. (29).
Graydon, Dr. T. W., 239 W. 4th St., Cincinnati, Ohio (30).

- Green, Caleb, M.D., Homer, Cortland Co., N. Y. (28).
 Green, Milbrey, M. D., No. 1 Columbus Square, Boston, Mass. (29).
 Greene, Jacob L., Pres. Mut. Life Ins. Co., Hartford, Conn. (23).
 Greene, Thos. A., 146 Martin St., Milwaukee, Wis. (31).
 Greenleaf, R. P., M. D., Henry Clay P. O., Del. (31).
 Greenough, W. W., 24 West St., Boston, Mass. (29).
 Greve, Theodor L. A., M. D., 260 W. 8th St., Cincinnati, Ohio (30).
 Gridley, Albert L., Gilead, Oxford Co., Me. (25).
 Grinnell, George Bird, 39 Park Row, New York, N. Y. (25).
 Grossklaus, John F., Navarre, Ohio (24).
 Gunning, William D. (22).
- Habirshaw, Wm. M., 159 Front St., New York, N. Y. (29).
 Hagemann, John, Howard Oil Co., Houston, Texas (29).
 Haight, Stephen S., West Farms, New York, N. Y. (31).
 Haines, Reuben, Haines St., Germantown, Pa. (27).
 Hale, Albert C., Ph. D., Box 65, Brooklyn, N. Y. (29).
 Hale, Miss Mary, care of Hon. J. J. Clarke, Kenilworth St., Roxbury, Mass. (31).
 Hale, William H., Ph. D., Albany, N. Y. (32).
 Haliburton, R. G., Q. C., Ottawa, Can. (31).
 Hall, Prof. Lyman B., Haverford, Pa. (31).
 Hallock, Albert P., Ph. D., 249 East 31st St., New York, N. Y. (31).
 Halsted, Byron D., 245 Broadway, New York, N. Y. (29).
 Hambach, Dr. G., 1419 Lami St., St. Louis, Mo. (26).
 Hammond, Geo. W., Hotel Hamilton, Boston, Mass. (28).
 Hammond, Mrs. Geo. W., Hotel Hamilton, Boston, Mass. (29).
 Harding, Henry, Salem, Mass. (31).
 Harding, Myron H., M. D., Lawrenceburg, Ind. (30).
 Hare, Prof. R. B., Hamilton, Ontario, Can. (28).
 Harford, Wm. G. W., 2132 O'Farrell St., San Francisco, Cal. (29).
 Harmon, Miss A. Maria, Ottawa, Can. (31).
 Harper, Geo. W., Cincinnati, Ohio (30).
 Harrington, W. H., Post Office Dept., Ottawa, Can. (29).
 Harris, I. H., Waynesville, Warren Co., Ohio (30).
 Harris, W. T., Lock Box 1, Concord, Mass. (27).
 Harrison, Edwin, 322 Pine St., Room 20, St. Louis, Mo. (11).
 Harrison, Geo. B., 520 Mulberry St., Bloomington, Ill. (29).
 Harrison, Thos., LL. D., Fredericton, N. B. (29).
 Hart, Charles P., M. D., Wyoming, Ohio (30).
 Hart, Rev. Prof. Samuel, Trinity College, Hartford, Conn. (22).
 Harvey, Charles W., Sup't Public Schools, Greensburg, Ind. (20).
 Haste, Prof. R. A., Streator, Ill. (30).
 Hatch, Horace, M. D., 1323 F St., N. W., Washington, D. C. (31).
 Hatch, Dr. P. L., Minneapolis, Minn. (31).
 Hatfield, Marcus P., M.D., Chicago Medical College, Chicago, Ill. (23).

- Hathaway, Nath'l, New Bedford, Mass. (30).
Haupt, Prof. Lewis M., University of Pennsylvania, Philadelphia, Pa. (32).
Haven, Franklin, jr., New England Trust Co., Boston, Mass. (29).
Hawkins, Marion S., 60 High St., Nashville, Tenn. (26).
Hayes, Francis B., Boston, Mass. (29).
Hayes, Richard, 700 Chestnut St., St. Louis, Mo. (27).
Haynes, Henry W., 239 Beacon St., Boston, Mass. (28).
Haywood, Prof. John, Otterbein Univ., Westerville, Ohio (30).
Heckman, Rev. Geo. C., Avondale, Cincinnati, Ohio (30).
Hedge, Fred. H., jr., Public Library, Lawrence, Mass. (28).
Hedges, Sidney M., 178 Devonshire St., Boston, Mass. (29).
Heighway, A. E., Cincinnati, Ohio (29).
Heighway, A. E., jr., 86 West 7th St., Cincinnati, Ohio (29).
Heighway, S. C., Cincinnati, Ohio (30).
Heine, Rev. Colborne, 168 Mance St., Montreal, Can. (31).
Heniup, N. H., Pence Opera House, Room 1, Minneapolis, Minn. (31).
Henck, J. B., jr. (29).
Henderson, Miss A. M., Minneapolis, Minn. (32).
Hendricks, Henry H., 512 Fifth Avenue, New York, N. Y. (30).
Hendricks, J. E., Des Moines, Iowa (29).
Henshaw, Samuel, Boston Soc. Nat. Hist., Boston, Mass. (29).
Hering, Prof. Dan'l W., Westminster, Md. (30).
Herman, Joseph E., Acushnet, Bristol Co., Mass. (32).
Herrick, Clarence L., Minneapolis, Minn. (31).
Herrick, F. H., Burlington, Vt. (31).
Hersey, George D., M. D., 261 Broad St., Providence, R. I. (29).
Hertzberg, Prof. Constantine, 140 Duffield St., Brooklyn, N. Y. (29).
Hewitt, Charles N., Sec. State Bd. of Health, Red Wing, Minn. (31).
Heys, Thomas, Toronto, Can. (29).
Hibbard, Miss Sarah E. (31).
Hickling, Daniel P., 301 Pennsylvania Ave., Washington, D. C. (32).
Hicks, John D., Old Westbury, Queen's Co., L. I. (23).
Hicks, John S., Roslyn, N. Y. (31).
Hicks, Prof. Lewis E., State Univ., Lincoln, Neb. (31).
Higginson, John A., 260 Clarendon St., Boston, Mass. (26).
Hilder, F. F., 1125 Bremen Avenue, St. Louis, Mo. (26).
Hildreth, Dr. John L., 37 Brattle St., Cambridge, Mass. (29).
Hill, Dr. H. H., cor. 5th and Race Sts., Cincinnati, Ohio (30).
Hill, Miss Lucy A., Lowell, Mass. (29).
Hills, Joseph L., 157 K St., South Boston, Mass. (31).
Hinckley, Miss Mary H., Mattapan Station, Milton, Mass. (31).
Hinds, Prof. J. I. D., Cumberland University, Lebanon, Tenn. (26).
Hingston, Dr. William H., Montreal, Can. (31).
Hinton, John H., M. D., 41 West 32nd St., New York, N. Y. (29).
Hitchcock, Henry, 404 Market St., St. Louis, Mo. (27).
Hoadley, J. C., 28 State St., Room 28, Boston, Mass. (29).

- Hobbs, A. C., Bridgeport, Conn. (28).
Hodge, J. M., Greenup, Greenup Co., Ky. (29).
Hoeltge, Dr. A., 322 Lime St., Cincinnati, Ohio (30).
Hoffman, Walter J., M. D., Bureau of Ethnology, Smithsonian Institution, Washington, D. C. (30).
Hogg, Prof. Alexander, Fort Worth, Texas (26).
Holabird, Gen. Samuel B., Q. M. Gen. U. S. A., Washington, D. C. (32).
Holbrook, F. N., E. M., 7 Jefferson St., Brooklyn, N. Y. (26).
Holbrook, Watson C., Coleta, Ill. (29).
Holden, L. E., Cleveland, Ohio (32).
Holland, John, 19 W. 4th St., Cincinnati, Ohio (30).
Holley, George W., Niagara Falls, N. Y. (19).
Hollick, Arthur, Box 105, New Brighton, Staten Island, N. Y. (31).
Hollingsworth, Miss Rose, Mattapan Station, Milton, Mass. (31).
Holly, Jno. I., 62 Beaver St., New York, N. Y. (29).
Holmes, Edw. J., 17 Beacon St., Boston, Mass. (29).
Holstein, Geo. Wolf, Box 34, Belvidere, Warren Co., N. J. (28).
Holstein, L. M., Belvidere, Warren Co., N. J. (31).
Holt, Alfred F., M. D., Cambridge, Mass. (29).
Holt, Henry, 12 East 23d St., New York, N. Y. (29).
Holzinger, Prof. John M., Winona, Minn. (32).
Homer, Chas. S., jr., of Valentine & Co., 323 Pearl St., New York, N. Y. (29).
Homes, Henry A., Librarian State Library, Albany, N. Y. (11).
Homes, Henry F., Albany, N. Y. (31).
Homsher, Dr. George W., Box 31, Fairfield, Franklin Co., Ind. (30).
Hood, E. Lyman, Minneapolis, Minn. (30).
Hood, Gilbert E., Lawrence, Mass. (29).
Hooper, Dr. F. H., 150 County St., New Bedford, Mass. (29).
Hopke, Theodore M., Hastings-on-Hudson, N. Y. (30).
Hopkirk, Prof. W. H., 505 Summer St., Burlington, Iowa (24).
Hoppock, A. E., Hastings-on-Hudson, N. Y. (29).
Horr, Asa, M. D., Dubuque, Iowa (21).
Horton, Rev. Sanford J., D.D., Cheshire, Conn. (28).
Hosmer, George M., 24 Church St., Boston, Mass. (20).
Hough, C. A., M. D., Waynesville, Warren Co., Ohio (30).
Houston, George M., Harrisonville, Mo. (26).
How, W. Storer, Chestnut, S. E. cor. 12th St., Philadelphia, Pa. (30).
Howard, Dr. Elmira Y., 170 W. 9th St., Cincinnati, Ohio (30).
Howe, Allen B., Ph. D., New Haven, Conn. (31).
Howe, Andrew J., M. D., Cincinnati, Ohio (28).
Howell, Edwin E., Rochester, N. Y. (25).
Howell, Richard L., Millville, N. J. (32).
Howland, Edw. P., 211 4½ St., Washington, D. C. (29).
Hubbard, George W., M. D., Nashville, Tenn. (26).
Hudson, George H., Plattsburgh, Clinton Co., N. Y. (31).

- Huling, Ray G., Fitchburg, Mass. (31).
Hulst, Rev. Geo. D., 15 Himrod St., Brooklyn, N. Y. (29).
Humphrey, D., M. D., Lawrence, Mass. (18).
Humphreys, A. W., Box 1384, New York, N. Y. (20).
Humphreys, Fred. H., M. D., 109 Fulton St., New York, N. Y. (30).
Humphreys, Dr. Frederick, 109 Fulton St., New York, N. Y. (29).
Hungerford, Edward, Burlington, Vt. (31).
Hunt, A. M., Cadet Engr. U. S. N., Navy Dept., Washington, D. C. (29).
Hunt, Harry J., 41 E. 3d St., Cincinnati, Ohio (30).
Hunt, Jacob H., M. D., 41 E. 3d St., Cincinnati, Ohio (30).
Hunt, Miss Sarah E., Salem, Mass. (20).
Huntington, Prof. Chester, Clinton, Oneida Co., N. Y. (26).
Huntington, George H. (30).
Hurd, E. O., 4 W. 3d St., Cincinnati, Ohio (30).
Hutchinson, Charles W., Utica, N. Y. (31).
Hutchinson, Prof. J. C., Monmouth, Warren Co., Ill. (32).
Hyatt, Jonathan D., Morrisania, N. Y. (29).
Hyatt, Col. Theodore, Pres. Penn. Military Acad., Chester, Pa. (30).
Hyde, Alfred T. (30).
- Iddings, Joseph P., Orange, N. J. (31).
Iles, George, Windsor Hotel, Montreal, Can. (31).
Ives, Hubert R., 791 Sherbrooke St., Montreal, Can. (31).
- Jack, John G., Chateauguay Basin, P. Q., Can. (31).
Jackson, Chas. C., 24 Congress St., Boston, Mass. (29).
James, Bushrod W., M. D., N. E. cor. 18th and Green Sts., Philadelphia, Pa. (29).
James, Davis L., 177 Race St., Cincinnati, Ohio (30).
James, Frederick H., M. D., Lancaster, N. Y. (25).
James, Henry, M. D., City Belleville, Ontario, Can. (29).
James, Mrs. Isabella, Brattle St., Cambridge, Mass. (31).
Janney, Reynold, Wilmington, Clinton Co., Ohio (30).
Jayne, Horace F., 1826 Chestnut St., Philadelphia, Pa. (29).
Jefferson, T. E., Hudson, Wis. (32).
Jenkins, Prof. Oliver P. (30).
Jenney, Herbert, cor. 4th and Walnut Sts., Cincinnati, Ohio (30).
Jesup, Morris K., 52 William St., New York, N. Y. (29).
Jewett, Henry S., M. D., 21 S. Ludlow St., Dayton, Ohio (30).
Johnson, Arthur B., Utica, N. Y. (29).
Johnson, Prof. Hosmer A., Academy of Sciences, Chicago, Ill. (22).
Johnston, Miss Elizabeth B., 937 K St., Washington, D. C. (30).
Johnston, Sanders W., Counsel at Law, 1427 F St., Washington, D. C. (29).
Joly, Henri Gustave, Quebec, Can. (32).
Jones, George W., Ithaca, N. Y. (32).

- Jones, Miss Hattie L. (30).
Jones, Rev. Hosea W., Delaware, Ohio (30).
Jones, Louis Q., 42 Farmington Ave., Hartford, Conn. (31).
Jones, Prof. Richard W., University of Mississippi, Oxford, Miss. (25).
Jones, Wm. A., Major of Engrs. U. S. A., Presidio of San Francisco, Cal. (29).
Jordan, Prof. David S., Bloomington, Ind. (31).
Joseph, J. H., Dorchester St., Montreal, Can. (31).
Judd, Hon. David W., 245 Broadway, New York, N. Y. (29).
Judge, Prof. J. F., cor. 6th and Mound Sts., Cincinnati, Ohio (30).
Julich, Wilhelm (29).
Justus, Irving J., Stanfordville, Dutchess Co., N. Y. (28).

Kebler, Eliot A., care John Kebler, Cincinnati, Ohio (30).
Keen, Wm. W., M. D., 1729 Chestnut St., Philadelphia, Pa. (29).
Keenan, Mrs. M. V., 238½ Elm St., Cincinnati, Ohio (30).
Kelley, Clarence E., Haverhill, Mass. (32).
Kellogg, David S., M. D., Plattsburgh, N. Y. (29).
Kellogg, James H., 1 Ida Terrace, Troy, N. Y. (29).
Kellogg, John H., M. D., Battle Creek, Mich. (24).
Kelsey, Prof. Ambrose P., Clinton, N. Y. (29).
Kemper, Dr. And. C., 101 Broadway, Cincinnati, Ohio (30).
Kennedy, Prof. George T., Kings College, Windsor, N. S. (29).
Kennedy, John, 113 University St., Montreal, Can. (31).
Kerr, Wm. H., Mass. Inst. of Technology, Boston, Mass. (29).
Kersting, Dr. H., East Eagle St., East Boston, Mass. (29).
Keyt, A. T., M. D., Walnut Hills, Cincinnati, Ohio (30).
Kidder, H. P., 40 State St., Boston, Mass. (29).
Kilgore, William, Minneapolis, Minn. (32).
Killebrew, J. B., Commissioner of Agric., Nashville, Tenn. (26).
Kimball, John Cone, Commonwealth Hotel, Boston, Mass. (30).
Kinder, Miss Sarah, 27 Lockerbie St., Indianapolis, Ind. (20).
King, A. F. A., M. D., 726 13th St. N. W., Washington, D. C. (29).
King, F. H., River Falls, Wis. (32).
King, Miss Harriet, Salem, Mass. (28).
King, Hiram U., Stamford, Conn. (31).
King, Mrs. Mary B. A., 21 Madison St., Rochester, N. Y. (15).
Kinner, Dr. Hugo, 1517 South Seventh St., St. Louis, Mo. (21).
Kirkland, Thomas, Toronto, Ontario, Can. (31).
Kirkpatrick, James A., 1138 Girard St., Philadelphia, Pa. (7).
Kitchell, John W., Pana, Christian Co., Ill. (32).
Kleinschmidt, John L. (29).
Knapp, Frederick N., Plymouth, Mass. (19).
Knapp, Prof. Seaman A., Ames, Iowa (32).
Knight, Prof. Charles M., Akron, Ohio (29).
Knight, Miss Elizabeth G., 125 East 54th St., New York, N. Y. (31).

- Knight, Walter H., Washington, D. C. (30).
 Knowlton, Wm. J., 168 Tremont St., Boston, Mass. (29).
 Kocsis, Alexander, Livingston, Guatemala (26).
- Lacoe, R. D., Pittston, Pa. (31).
 Ladd, Wm. H., Chauncy Hall School, 259 Boylston St., Boston, Mass. (29).
 Laflamme, Prof. J. C. K., Laval Univ., Quebec, Can. (29).
 Laist, Otto, Cincinnati, Ohio (30).
 Lakes, Prof. Arthur, State School of Mines, Golden, Col. (26).
 Lamb, Mrs. Martha J., Coleman House, New York, N. Y. (29).
 Lamborn, Robert H., Ph. D., 47 William St., New York, N. Y. (28).
 Lane, Jonathan A., Boston, Mass. (29).
 Lagenbeck, Karl W., cor. 7th and Vine Sts., Cincinnati, Ohio (30).
 Larimer, James E., Lawrenceburg, Ind. (30).
 Larkin, Frederick, M. D., Randolph, N. Y. (28).
 Lathrop, J. C., Bridgeport, Conn. (31).
 Latimer, Charles, Chief Eng. N. Y. P. and O. R. R., Cleveland, Ohio (31).
 Latour, Major L. A. Hugnet, 36 McGill College Ave., Montreal, Can. (31).
 Laudy, Louis H., School of Mines, Columbia College, New York, N. Y. (28).
 Lawrence, Hon. Edw., Pres't Bunker Hill National Bank, Charlestown, Mass. (18).
 Laws, Miss Annie, 100 Dayton St., Cincinnati, Ohio (30).
 Lawson, George, LL. D., Halifax, N. S. (31).
 Lawson, Prof. Victor F., Chicago, Ill. (32).
 Lea, John McCormick, Nashville, Tenn. (26).
 Learned, Rev. J. C., 1748 Waverly Place, St. Louis, Mo. (27).
 Leavenworth, Francis P., Leander McCormick Observ., University of Virginia, Va. (30).
 Le Boutillier, Charles A., M. D., Cincinnati, Ohio (30).
 Ledyard, L. W., Cazenovia, Madison Co., N. Y. (29).
 Lee, Prof. Leslie A., Bowdoin College, Brunswick, Me. (29).
 Lee, Wm., M. D., 2111 Penna. Avenue, Washington, D. C. (29).
 Leete, James M., M.D., 2912 Washington Avenue, St. Louis, Mo. (27).
 Leftman, Henry, M. D., S. E. cor. 13th and Locust Sts., Philadelphia, Pa. (31).
 Lehman, G. W., Ph. D., 57 So. Gay St., Baltimore, Md. (30).
 Leland, Eugene R., P. O. Box 2364, New York, N. Y. (25).
 Lemp, Wm. J., cor. Cherokee and 2nd Carondelet Ave., St. Louis, Mo. (27).
 Lennon, William H., Brockport, N. Y. (31).
 Leoser, Charles Mc K., 244 W. 39th St., New York, N. Y. (32).
 Leslie, Dr. James, 278 7th St., Cincinnati, Ohio (30).
 Lesley, Joseph, care Townsend, Whelen & Co., 309 Walnut St., Philadelphia, Pa. (8).
 Letchworth, Josiah, Buffalo, N. Y. (25).

- L'Etoile, Joseph, Dept. of Interior, Quebec, Can. (31).
 Letterman, Geo. W., Allenton, Mo. (27).
 Lewis, David S., 609 Commercial St., Boston, Mass. (29).
 Lewis, Elias, jr., 111 St. Mark's Ave., Brooklyn, N. Y. (23).
 Libbey, Joseph, Georgetown, D. C. (31).
 Libbey, William, jr., Princeton, N. J. (29).
 Liebig, Dr. G. A., 87 Exchange Place, Baltimore, Md. (30).
 Lindsley, Adrian Van S., Sec'y Univ. of Nashville, Nashville, Tenn. (26).
 Lippman, Morris J., care Graff, Bennett & Co., St. Louis, Mo. (27).
 Little, William, Montreal, Can. (31).
 Livermore, Mrs. M. A. C., 24 North Avenue, Cambridge, Mass. (29).
 Lloyd, John U., Cincinnati, Ohio (30).
 Lloyd, Mrs. Rachel, Louisville, Ky. (31).
 Locke, W. M., Agt. L. and N. R. R., Marshalls Ferry, White Co., Ill. (29).
 Logan, John, M. D., 141 E. 15th St., New York, N. Y. (29).
 Lomb, Carl F., Rochester, N. Y. (29).
 Loomis, Horatio, Burlington, Vt. (31).
 Loomis, Leverett M., Chester, S. C. (28).
 Loud, Prof. Frank H., Colorado Springs, Col. (29).
 Lounsbury, Prof. Thos. R., New Haven, Conn. (31).
 Lovell, John W., New York, N. Y. (31).
 Lovewell, Prof. Joseph T., Washburn College, Topeka, Kansas (25).
 Low, Seth, 31 Burling Slip, New York, N. Y. (29).
 Lowe, C. B. F., Augusta, Ga. (30).
 Lowe, Nathl. M., 103 Court St., Boston, Mass. (29).
 Lowell, Aug., 60 State St., Boston, Mass. (29).
 Lowman, Oscar, 66 W. 8th St., Cincinnati, Ohio (30).
 Lowrie, J. R., Warriorsmark, Pa. (29).
 Lufkin, Albert, Newton, Iowa (31).
 Lugo, Dr. Orazio, Room 2, University Building, Washington Sq., New York, N. Y. (29).
 Lunn, William, Montreal, Can. (31).
 Lyford, Prof. Moses, Waterville, Me. (22).
 LYMAN, BENJ. SMITH, Northampton, Mass. (15).
 Lyman, Henry H., 74 McTavish St., Montreal, Can. (29).
 Lynch, W. H., Danville, P. Q., Can. (31).

 MacArthur, Charles L., Troy, N. Y. (19).
 MacCauley, Rev. Clay, Bureau of Ethnology, Washington, D. C. (29).
 Mac Laurin, Rev. Donald D., 2114 17th Ave. S., Minneapolis, Minn. (32).
 Mack, William, M.D., Salem, Mass. (21).
 Macomber, Albert E., Toledo, Ohio (30).
 Macomber, Isaac B., Portsmouth, R. I. (29).
 Macy, Arthur, C. E., Silver King, Pinal Co., Arizona Terr. (26).
 Mager, W., 57 So. Gay St., Baltimore, Md. (30).

- Maine, Henry C., Rochester, N. Y. (29).
Major, Dr. George W., 1398 St. Catherine St., Montreal, Can. (31).
Makeever, John L., Osceola, Polk Co., Neb. (32).
Mallinckrodt, Edw., P. O. Sub-Station A, St. Louis, Mo. (29).
Maloney, James A., P. O. Box 491, Washington, D. C. (30).
Manning, Richard C., Salem, Mass. (29).
Manning, Richard H., Brooklyn, N. Y. (29).
Manning, Warren H., Reading, Mass. (31).
Mansfield, I. F., Cannelton, Beaver Co., Pa. (32).
Mansfield, J. M., Mt. Pleasant, Iowa (25).
Marble, J. Russel, Worcester, Mass. (31).
Marble, Miss Sarah, Woonsocket, R. I. (29).
Marcy, Henry O., M. D., 690 Main St., Cambridge, Mass. (28).
Marler, George L., Montreal, Can. (31).
Marsden, Samuel, 907 Clay Avenue, St. Louis, Mo. (27).
Marshall, William I., Fitchburg, Mass. (27).
Martin, Mrs. Lillie J., 16 Burton Place, Chicago, Ill. (32).
Martin, Prof. William J., Davidson College, N. C. (31).
Martindale, Isaac C., Camden, N. J. (26).
Marvin, Hon. Wm., Skaneateles, N. Y. (28).
Mason, Norman N., Providence, R. I. (29).
Mason, Dr. William P., Troy, N. Y. (31).
Mathews, Robert, 96 Spring St., Rochester, N. Y. (25).
Matlack, Charles, Germantown, Pa. (27).
Matthews, E. O., Capt. U. S. N., U. S. Flag-ship "New Hampshire" (1st Rate), Newport, R. I. (28).
Mattison, Joseph G., 197 Pearl St., New York, N. Y. (30).
Maxwell, Geo. M., Bond Hill, Ohio (30).
May, Miss Abby W., 3 Exeter St., Boston, Mass. (29).
May, Addison, West Chester, Pa. (29).
May, John J., Box 5213, Boston, Mass. (29).
Mayer, William G., Cincinnati, Ohio (30).
Mays, Dr. Thos. J., Upper Lehigh, Pa. (29).
McAdams, Wm., jr., Otterville, Ill. (27).
Mc Cabe, Thomas, Patent Office, Ottawa, Can. (32).
McChesney, Charles E., M. D., U. S. A., Fort Bennett, Dakota Terr. (30).
McClellan, Miss Fanny, Oxford, Ohio (30).
McClung, Calvin M., Knoxville, Tenn. (26).
McCook, Rev. Henry C., Philadelphia, Pa. (29).
McCutchen, Aug. R., Dept. Agric., Atlanta, Ga. (25).
McDonald, Prof. Marshall, Lexington, Va. (29).
McFadden, Prof. L. H., Westerville, Ohio (32).
McGee, Charles K., Ann Arbor, Mich. (32).
McGobrick, James, Minneapolis, Minn. (32).
McGuire, Joseph D., Ellicott City, Md. (30).
McInnis, Prof. Louis L., College Station, Texas (31).

- McLachlan, J. S., 480 St. Paul St., Montreal, Can. (31).
 McLarty, James M., care Alex. Moore, No. 3 School St., Boston, Mass. (31).
 McLennan, Hugh, Montreal, Can. (31).
 McMaster, Æneus, Can. (31).
 McNair, F. V., Commander U. S. N., Naval Academy, Annapolis, Md. (28).
 McNeal, Albert T., Bolivar, Tenn. (26).
 McNeill, Malcolm, Princeton, N. J. (32).
 McWhorter, Tyler, Aledo, Ill. (20).
 Mead, Walter H., 67 Wall St., New York, N. Y. (29).
 Means, Mrs. W. E. C., Yellow Springs, Greene Co., Ohio (30).
 Mehner, Edwin L., 34 E. Pearl St., Cincinnati, Ohio (30).
 Meier, Theodore G., St. Louis, Mo. (27).
 Meiners, Prof. Hermann, St. Xavier College, Cincinnati, Ohio (30).
 Mendenhall, R. J., Minneapolis, Minn. (31).
 Merchant, Richard V., East Weymouth, Mass. (29).
 Merkel, G. H., M. D., 322 Shawmut Avenue, Boston, Mass. (29).
 Merrick, Hon. Edwin T., New Orleans, La. (29).
 Merriman, Prof. Geo. B., Rutgers College, New Brunswick, N. J. (29).
 Merriman, Mansfield, C. E., Ph. D., Bethlehem, Pa. (32).
 Merryman, Capt. James H., U. S. R. M., 3 Bowling Green, New York, N. Y. (31).
 Merryweather, Geo. N., cor. 6th and Race Sts., Cincinnati, Ohio (30).
 Metcalf, Caleb B., Highland Military Academy, Worcester, Mass. (20).
 Metz, Charles L., M. D., Madisonville, Hamilton Co., Ohio (30).
 Mew, Wm. M., Army Med. Mus., Washington, D. C. (29).
 Michels, John, Box 3230, New York, N. Y. (29).
 Miles, Prof. Manly, Mass. Agric. Coll., Amherst, Mass. (29).
 Miller, Dr. Chas. A., Longview Asylum, Carthage, Hamilton Co., Ohio (30).
 Miller, D. B., 604 Greenup St., Covington, Ky. (30).
 Miller, Edgar G., 279 Baltimore St., Baltimore, Md. (29).
 Miller, Enoch H., M. D., Liberty, Mo. (32).
 Miller, Geo. M., 20 Broad St., New York, N. Y. (29).
 Miller, John A., Cairo, Ill. (22).
 Miller, S. A., Cincinnati, Ohio (26).
 Mills, James, M. A., Guelph, Ontario, Can. (31).
 Mills, T. Wesley, Montreal, Can. (31).
 Mills, William H., Hamilton, Ontario, Can. (31).
 Minns, Susannah, 14 Louisberg Square, Boston, Mass. (32).
 Minot, Francis, M. D., 65 Marlborough St., Boston, Mass. (29).
 Mitchell, Geo. O., Hanover, N. H. (29).
 Mixter, Calvin S., Census Bureau, Washington, D. C. (31).
 Moat, Robert, Montreal, Can. (31).
 Moffatt, George T., M. D., D. M. D., 132 Boylston St., Boston, Mass. (25).
 Mohr, C. A., Mobile, Ala. (30).
 Mohr, Charles, Mobile, Ala. (30).

- Mohr, Miss Emily, Cincinnati, Ohio (30).
Mohr, Miss Marie, Cincinnati, Ohio (30).
Mohr, Paul, Cincinnati, Ohio (30).
Moliner, Adolfo, 530 Cerro, Havana, Cuba (28).
Molson, John, Montreal, Can. (31).
Molson, John H. R., Montreal, Can. (31).
Montgomery, Henry, 536 Ontario St., Toronto, Can. (29).
Mooar, Daniel, Keokuk, Iowa (27).
Moody, Mrs. Mary B., M. D., 187 N. Pearl St., Buffalo, N. Y. (25).
Moore, Alex., 3 School St., Boston, Mass. (29).
Moore, Alvin H., Magog, P. Q., Can. (31).
Moore, E. C., care Tiffany & Co., New York, N. Y. (30).
Morehouse, George W., Wayland, Steuben Co., N. Y. (24).
Morey, Rev. A. B., Cincinnati, Ohio (30).
Morgan, Mrs. Mary E., 95 So. Fitzhugh St., Rochester, N. Y. (31).
Morgan, Wm. F., 1 East 40th St., New York, N. Y. (27).
Morison, Dr. N. H., Provost of Peabody Institute, Baltimore, Md. (17).
Morison, Harrison G. O., Minneapolis, Minn. (32).
Morison, Rebecca N. (32).
Morrice, D., Montreal, Can. (31).
Morrison, Nathan J., Springfield, Mo. (29).
Morse, Charles J., Youngstown, Ohio (31).
Morse, H. L., M. D., Park Square, Boston, Mass. (31).
Morse, Mrs. Mary J., 57 Jackson St., Lawrence, Mass. (29).
Mortimer, Capt. John H., care of F. Habirshaw, 113 Maiden Lane, New York, N. Y. (31).
Morton, Miss Anna J., 1800 Michigan Ave., Chicago, Ill. (31).
Moser, Lieut. Jeff. F., U. S. N., Slatington, Pa. (28).
Mosgrove, Samuel M., M. D., Urbana, Ohio (30).
Mott, Dr. H. A., jr., 105 Water St., New York, N. Y. (27).
Mowry, Wm. A., 49 Snow St., Providence, R. I. (29).
Mühlberg, William, Race and Elder Sts., Cincinnati, Ohio (30).
Muir, John, Martinez, Cal. (22).
Muir, William, 1395 St. Catherine St., Montreal, Can. (31).
Müller, Herman E., M. D., Oakland, Cal. (32).
Munn, John P., M. D., 18 West 58th St., New York, N. Y. (31).
Munro, Rev. A. H., 340 Bleury St., Montreal, Can. (31).
Murdoch, John, 195 Walnut Avenue, Roxbury, Mass. (29).
Murdock, J. B., Lieut. U. S. N., 24 Alaska St., Roxbury, Mass. (28).
Murphy, Edward, 405 St. Paul St., Montreal, Can. (31).
Murphy, Patrick J., Columbia Hospital, Washington, D. C. (30).
Murray, Rev. Dr. J. Clark, 111 Mackay St., Montreal, Can. (31).
Murtfeldt, Miss Augusta, Kirkwood, Mo. (29).
Mussey, Rev. Ch. F., Cincinnati, Ohio (30).
Myers, John A., Bethany, West Va. (30).
Myricke, Lockwood, Pacific Guano Co., Boston, Mass. (30).

- Nachtrieb, Henry F., 15 North St., St. Paul, Minn. (29).
 Nagel, Herman, M.D., 2044 Lafayette Avenue, St. Louis, Mo. (30).
 Nelson, Anson, City Treasurer, Nashville, Tenn. (26).
 Nelson, Richard, Cincinnati, Ohio (30).
 Nesmith, Henry E., jr., 28 South St., New York, N. Y. (30).
 Nettleroth, Henry, C. E., Louisville, Ky. (29).
 Nettleton, A. B., Minneapolis, Minn. (31).
 Nettleton, Chas., Room 20, 117 Broadway, New York, N. Y. (30).
 Newington, Harry M., 1603 Washington Ave., St. Louis, Mo. (31).
 Newton, Rev. John, Mary Esther, West Fla. (7).
 Nichols, H. E., Lieut. Comdr. U. S. N., Box 967, San Francisco, Cal. (29).
 Nicholson, Prof. Hunter, Knoxville, Tenn. (26).
 Nolan, Edw. J., M. D., Philadelphia, Pa. (29).
 Norman, Geo. H., C. E., Newport, R. I. (29).
 Norton, Lewis M., Ph. D., Mass. Inst. of Technology, Boston, Mass. (29).
 Norton, Oliver D., M. D., Cincinnati, Ohio (31).
 Noyes, William A., Ph. D., Univ. of Tennessee, Knoxville, Tenn. (32).
 Nuttall, L. W., Nuttallburg, Fayette Co., West Va. (29).

 Ober, Frederick A., Beverly, Mass. (31).
 Oliver, Prof. Marshal, U. S. N., Naval Acad., Annapolis, Md. (31).
 Olmsted, Fred. Law, 209 West 46th St., New York, N. Y. (22).
 Ordway, Mrs. John M., Mass. Inst. Technology, Boston, Mass. (29).
 Orm, John, Paducah, McCracken Co., Ky. (27).
 Ormond, Prof. Alexander T., Princeton, N. J. (32).
 Osborn, Francis A., 43 Milk St., Boston, Mass. (29).
 Osborn, Henry L., Curator Mus. of Wesleyan Univ., Middletown, Conn. (29).
 Osborn, Herbert, Ames, Iowa (32).
 Osborne, Mrs. Ada M., Waterville, Oneida Co., N. Y. (19).
 Osborne, Amos O., Waterville, Oneida Co., N. Y. (19).
 Osbun, Prof. Isaac J., Salem, Mass. (29).
 Osgood, Joseph B. F., Salem, Mass. (31).
 Otis, J. Sanford (30).
 Overstolz, Hon. Henry, Mayor of St. Louis, St. Louis, Mo. (27).
 Owens, Frank A., 304 North St., Burlington, Vt. (31).
 Owens, Mary E., cor. 7th and John Sts., Cincinnati, Ohio (30).

 Paddock, John R., Hoboken, N. J. (29).
 Paine, Charles, 15 Broad St., New York, N. Y. (22).
 Paine, Sidney B., P. O. Box 338, Fall River, Mass. (30).
 Palmer, Miss Alice W., Bellevue St., Roxbury, Mass. (27).
 Palmer, Rev. Benj. M., Box 1628, New Orleans, La. (21).
 Palmer, Dr. Edward, Smithsonian Institution, Washington, D. C. (22).

- Palmer, Miss Mary T., Bellevue St., Roxbury, Mass. (30).
Pardee, Walter S., Minneapolis, Minn. (32).
Parsons, Henry B., 72 William St., New York, N. Y. (30).
Parsons, S. S., Lodi, Medina Co., Ohio (30).
Patrick, Dr. J. J. R., Belleville, St. Clair Co., Ill. (27).
Patton, William H., Waterbury, Conn. (29).
Paul, Caroline A., M.D., Vineland, Cumberland Co., N. J. (23).
Payne, A. R., Price's Hill, Cincinnati, Ohio (30).
Peabody, Cecil H., Champaign, Ill. (32).
Peabody, Prof. S. H., Regent Illinois Industrial Univ., Champaign, Ill. (30).
Pearson, Rev. Arthur H., Northfield, Minn. (32).
Peaslee, Prof. John B., Supt. Public Schools, Cincinnati, Ohio (30).
Peck, Mrs. John H., 30 Second St., Troy, N. Y. (28).
Peck, W. A., C. E., Surveyor General's Office, Denver, Col. (19).
Peelor, David, Johnstown, Cambria Co., Pa. (30).
Peet, Emerson W. (32).
Peffer, George P., Pewaukee, Wis. (32).
Peirce, Benj. O., jr., Beverly, Mass. (29).
Peirce, Prof. C. S., Johns Hopkins Univ., Baltimore, Md. (30).
Peirce, Cyrus N., D.D.S., 1415 Walnut St., Philadelphia, Pa. (31).
Pennock, Edw., 924 Chestnut St., Philadelphia, Pa. (29).
Percy, H. C., Norfolk, Va. (32).
PERKINS, ARTHUR, 49 Woodland St., Hartford, Conn. (31).
Perkins, Prof. Herbert B., Appleton, Wis. (32).
Perry, Hon. Aaron F., Cincinnati, Ohio (30).
Peter, Alfred M., Lexington, Ky. (29).
Peters, Judge Thos. M., Moulton, Ala. (29).
Pettee, Prof. C. H., Hanover, N. H. (31).
Phelps, A. M., M. D., Chateaugay, N. Y. (31).
Phelps, George, Nashua, N. H. (31).
Philbrick, Edw. S., Brookline, Mass. (29).
Phillips, Henry, jr., 320 South 11th St., Philadelphia, Pa.
Phillips, John C., cor. Berkeley & Marlborough Sts., Boston, Mass. (29).
Phin, John, Ed. Am. Journ. Micros., 14 Dey St., New York, N. Y. (25).
Pickett, Dr. Thos. E., Maysville, Mason Co., Ky. (25).
Pignolet, Louis H., 104 Famille St., Montreal, Can. (31).
Pike, J. W., Vineland, N. Y. (29).
Pike, W. A., Univ. of Minn., Minneapolis, Minn. (29).
Pillsbury, Prof. John H., Smith College, Northampton, Mass. (23).
Pinkerton, T. H., M.D., Oakland, Alameda Co., Cal. (27).
Pirz, Anthony, Long Island City, N. Y. (29).
Pitkin, Lucius, 434 Madison Avenue, New York, N. Y. (29).
Pitman, Chas. B., Somerville, Mass. (29).
Pitman, Prof. Stephen M., College Hill, Mass. (29).
Pitt, Prof. William H., 138 College St., Buffalo, N. Y. (25).
Platt, W. G., 615 Walnut St., Philadelphia, Pa. (32).
Plympton, Gilbert M., 245 Broadway, New York, N. Y. (29).

- Pohlman, Dr. Julius, Buffalo, N. Y. (32).
 Porteous, John, 26 Prince Arthur St., Montreal, Canada (22).
 Porter, Edward D., State Univ., Minneapolis, Minn. (32).
 Porter, John B., Glendale, Hamilton Co., Ohio (30).
 Potter, Rev. Henry C., 804 Broadway, New York, N. Y. (29).
 Power, Prof. Frederick B., Univ. of Wis., Madison, Wis. (31).
 Prang, Louis, Boston, Mass. (29).
 Prescott, Wm. I., 264 Race St., Cincinnati, Ohio (30).
 Preston, Prof. W. C., Laboratory, Iowa State Univ., Iowa City, Iowa (21).
 Prince, Gen. Henry, U. S. A., Eastport, Me. (22).
 Prince, L. M., 148 W. 4th St., Cincinnati, Ohio (30).
 Prosser, Col. Wm. F., Seattle, King Co., Washington Terr. (26).
 Proudfoot, Alex., M. D., 2 Phillips Place, Montreal, Can. (31).
 Pruyn, John V. L., jr., Albany, N. Y. (29).
 Purinton, Prof. D. B., Morgantown, W. Va. (31).
 Purinton, Prof. George D., Greenville, S. C. (31).
 Putnam, Chas. P., M. D., 63 Marlborough St., Boston, Mass. (28).
 Putnam, Mrs. M. L. D., Davenport, Iowa (32).

 Quick, Edgar R., Brookville, Franklin Co., Ind. (30).

 Rains, Geo. W., M. D., LL. D., Augusta, Ga. (29).
 Rand, C. F., M.D., Batavia, N. Y. (27).
 Randolph, A. F., Fredericton, N. B. (29).
 Rasin, R. W., Box 715, Baltimore, Md. (30).
 Rathbun, Frank R., 40 Franklin St., Auburn, N. Y. (29).
 Rattermann, H. A., 12th and Walnut Sts., Cincinnati, Ohio (30).
 Reading, Edgar, M. D., 3750 Langley Ave., Chicago, Ill. (32).
 Redding, Thos. B., Ph. D., New Castle, Ind. (29).
 Reed, C. A. L., Hamilton, Ohio (30).
 Reed, Mrs. Ellen B., So. Div. High School, Chicago, Ill. (32).
 Reed, Edwin, 178 Devonshire St., Boston, Mass. (29).
 Reed, Dr. R. C. S., Jones' Station, Butler Co., Ohio (30).
 Renninger, John S., M. D., Findlay, Hancock Co., Ohio (31).
 Rice, Herbert S., Lawrence, Mass. (32).
 Rice, Rev. Wm., D. D., Springfield, Mass. (28).
 Richards, Edgar, Dep't of Agric., Washington, D. C. (31).
 Richardson, Clifford, Dept. of Agric., Washington, D. C. (30).
 Richardson, F. C. A., Nat. Stock Yards, E. St. Louis, Mo. (20).
 Richardson, Tobias G., M. D., New Orleans, La. (30).
 Richmond, Adelbert G., Canajoharie, N. Y. (30).
 Rickard, Wm. T., Assay Office, Tucson, Arizona Terr. (29).
 Rideout, Bates S., Lewiston, Me. (31).
 Ridler, C. E., Kingston, Mass. (29).
 Riggs, Geo. W., 115 West 47th St., New York, N. Y. (26).
 Riley, Mrs. Susan, Mobile, Ala. (31).
 Ripley, George C., Minneapolis, Minn. (32).
 Ripley, Mrs. George C., Minneapolis, Minn. (32).

- RIVERA, JOSÉ DE, Inwood-on-the-Hudson, New York, N. Y. (29).
Robbins, E. P., Cincinnati, Ohio (30).
Robbins, Miss Ida F., Arlington, Mass. (31).
Robbins, W. K., Mass. Inst. of Technology, Boston, Mass. (29).
Roberts, Thomas S., 27 North 8th St., Minneapolis, Minn. (31).
Robertson, Andrew, Montreal, Can. (31).
Robertson, Col. D. A., St. Paul, Minn. (32).
Robertson, Col. Robert S., Fort Wayne, Ind. (20).
ROBERTSON, THOMAS D., Rockford, Ill. (10).
Robeson, Henry B., care Mills, Robeson & Smith, 34 Wall St., New York, N. Y. (29).
Robins, Sampson P., LL. D., Hochelaga, P. Q., Can. (31).
Robinson, Prof. Franklin C., Brunswick, Me. (29).
Robinson, Prof. Otis Hall, Rochester, N. Y. (23).
Robson, Miss Kate, 186 Michigan St., Indianapolis, Ind. (32).
Roeder, Prof. F. A., Ohio Medical College, Cincinnati, Ohio (30).
Rogers, Dr. H. Raymond, Dunkirk, N. Y. (30).
Rolfe, Charles W., Champaign, Ill. (32).
Roots, G. Y., N. W. cor. 4th and Walnut Sts., Cincinnati, Ohio (30).
Ross, Denman Waldo, Ph. D., Cambridge, Mass. (29).
Ross, M. D., Boston, Mass. (29).
Roy, Rev. James, Cobourg, Ont., Can. (31).
Royce, C. C., Box 585, Washington, D. C. (30).
Rumsey, Bronson C., 58 & 60 Exchange St., Buffalo, N. Y. (15).
Rupp, Wm., 961 3d Ave., New York, N. Y. (27).
Russell, Dr. Linus E., Springfield, Ohio (30).
Russell, W. H. H., S. W. cor. Fifth and Olive streets, St. Louis, Mo. (24).
Rust, Horatio N., Pasadena, Los Angeles Co., Cal. (26).

Sabin, Prof. Alvah H., 457 Main St., Burlington, Vt. (31).
Safford, Charles W., Rutland, Vt. (26).
Safford, Dr. Mary J., 308 Columbus Ave., Boston, Mass. (31).
Sage, John H., Portland, Conn. (23).
Salisbury, Stephen, jr., Worcester, Mass. (29).
Salmon, Daniel E., Dep't of Agric., Washington, D. C. (31).
Salter, Richard P., 18 Wall St., New York, N. Y. (30).
Sanborn, Prof. J. W., Missouri Agric. Coll., Columbia, Mo. (31).
Sander, Dr. Enno, St. Louis, Mo. (27).
Sattler, Dr. Robert, 64 W. 7th St., Cincinnati, Ohio (30).
Saville, James H., 342 D St., N. W., Washington, D. C. (29).
Sayre, Robert H., Bethlehem, Pa. (28).
Scammon, J. Young, Chicago, Ill. (17).
SCHAEFFER, CHAS., M. D., 1309 Arch St., Philadelphia, Pa. (29).
Schaffranck, Dr. A., Box 424, Wheeling, W. Va. (27).
Schaub, Julius W., Ass't Eng'r, Baltimore Bridge Co., St. Louis, Mo. (27).
Schmid, Dr. H. Ernest, White Plains, N. Y. (25).
Schmidt, Dr. H. D., 263½ Canal St., New Orleans, La. (29).
Schöney, Dr. L., 170 E. 71st St., New York, N. Y. (29).

- Schuermann, W. H., Cincinnati, Ohio (30).
 Schultz, Carl H., 860 Broadway, New York, N. Y. (29).
 Schwarz, E. A., U. S. Dept. of Agric., Washington, D. C. (29).
 Scofield, W. H., Cannon River Falls, Goodhue Co., Minn. (32).
 Scott, Andrew J., M. D., Loudonville, Ohio (32).
 Scott, Aug. E., Lexington, Mass. (29).
 Scott, Miss L. Content, Loudonville, Ohio (32).
 Scott, Martin P., M. D., Blacksburg, Va. (31).
 Scoville, Dr. S. S., Lebanon, Ohio (30).
 Scribner, Edward E., St. Paul, Minn. (32).
 Scribner, the Hon. G. Hilton, Yonkers, N. Y. (30).
 Scudder, John M., M. D., Cincinnati, Ohio (30).
 Seagrave, Frank E., Providence, R. I. (28).
 Seargeant, L. J., Montreal, Can. (31).
 Secrist, Dr. H. C., 540 Race St., Cincinnati, Ohio (30).
 Seely, Chas. A., 714 Lexington Ave., New York, N. Y. (18).
 Seiler, Prof. Jacob F., Harrisburg, Pa. (30).
 Selfridge, J. R., Lieut. U. S. N., Navy Dept., Washington, D. C. (29).
 Senecal, L. A., 17 Place d'Armes Square, Montreal, Can. (31).
 Sennett, George B., Meadville, Pa. (31).
 Sewall, Susan W., 481 Carroll St., St. Paul, Minn. (32).
 Sewall, Hannah R., 481 Carroll St., St. Paul, Minn. (32).
 Seymour, Prof. William P., 105 Third St., Troy, N. Y. (19).
 Seyms, George H., care of Seyms & Co., Hartford, Conn. (31).
 Shackelford, Mrs. Elizabeth P., Saratoga Springs, N. Y. (28).
 Shackelford, G. R. P., Saratoga Springs, N. Y. (29).
 Shackelford, Rev. J. W., 111 E. 82nd St., New York, N. Y. (29).
 Share, William W., 336 Navy St., Brooklyn, N. Y. (31).
 Sharples, Stephen P., 13 Broad St., Boston, Mass. (29).
 Shaw, Cyrus, Mountainville P. O., N. Y. (29).
 SHEAFER, A. W., Pottsville, Pa. (28).
 Sheaffer, Walter S., Pottsville, Pa. (25).
 Shearer, James, Montreal, Can. (31).
 Shearer, John S., Montreal, Can. (31).
 Shelton, Prof. Edward M., Manhattan, Kansas (32).
 Shepard, Rev. Morrill A., Lebanon, St. Clair Co., Ill. (30).
 Shepard, William A., Saratoga Springs, N. Y. (28).
 Shepherd, F. A., 21 North Vine Street, Nashville, Tenn. (26).
 Sheppard, Sam'l A. D., Boston, Mass. (29).
 Sherman, Prof. F. A., Hanover, N. H. (29).
 Sherman, Lewis, M. D., Milwaukee, Wis. (30).
 Short, Sidney H., Denver, Col. (28).
 Shorten, John W., 191 W. 4th St., Cincinnati, Ohio (30).
 Shultz, Charles S., Hoboken, N. J. (31).
 Sibley, Miss M. F., East Walnut Hills, Grandin Road, Cincinnati, Ohio (30).
 Silliman, Wyllis A., Clarkson, N. Y. (31).
 Simon, Prof. Wm., College of Pharmacy, Baltimore, Md. (29).

- Simonds, Prof. Frederic W., San José, Cal. (25).
Simpson, E., Commodore U. S. N., U. S. Navy Yard, League Island, Pa. (28).
Skinner, A. G., M. D., Youngstown, Niagara Co., N. Y. (29).
Slade, Elisha, Somerset, Mass. (29).
Smead, Miss Marian M., Batavia, N. Y. (31).
Smith, Benj. G., Cambridge, Mass. (29).
Smith, Prof. C. Alfred, Hulton, Allegheny Co., Pa. (30).
Smith, Prof. Charles A., Washington Univ., St. Louis, Mo. (27).
Smith, Prof. Charles J., Cleveland, Ohio (32).
Smith, Miss Ellen E., Lake Erie Seminary, Painesville, Ohio (32).
Smith, Goldwin, The Grange, Toronto, Can. (29).
Smith, Dr. H. A., 286 Race St., Cincinnati, Ohio (30).
Smith, Henry L., 149 Broadway, New York, N. Y. (26).
Smith, Mrs. Henry L., 149 Broadway, New York, N. Y. (26).
Smith, Henry T., Buffalo, N. Y. (25).
Smith, Herbert E., M. D., Instructor of Chem. Med. Dep't, Yale College, New Haven, Conn. (31).
Smith, Prof. Herbert S. S., College of New Jersey, Princeton, N. J. (29).
Smith, Herbert W., Academy of Sciences, Box 2621, St. Paul, Minn. (26).
Smith, Mrs. J. Lawrence, Louisville, Ky. (26).
Smith, J. W., M.D., Charles City, Iowa (21).
Smith, Miss Jennie, Peabody Mus., Cambridge, Mass. (29).
Smith, John B., 290 3d Ave., Brooklyn, N. Y. (32).
Smith, S. Hanbury, M. D., New York, N. Y. (29).
Smith, Prof. Thomas B., Glasgow, Mo. (30).
Smith, Thomas H., 161 La Salle St., Chicago, Ill. (31).
Smith, Wm. Sooy, C. E., Maywood, Ill. (29).
Smucker, Isaac, Newark, Ohio (29).
Smyth, Prof. Jas. D., Burlington, Iowa (28).
Snelling, Geo. H., Hotel Berkeley, Boston, Mass. (29).
Snyder, Henry, jr., Institute for the Blind, Columbus, Ohio (30).
Soley, John C., Lieut. U. S. N., Navy Dept., Washington, D. C. (29).
Solomons, Miss Augusta I., Sumter, S. C. (31).
Solomons, Miss Kate C., Sumter, S. C. (31).
Solomons, Miss Maude C., Sumter, S. C. (31).
Soper, A. W. (27).
Spafford, F. A., M. D., Flandreau, Moody Co., Dakota Terr. (29).
Spear, Rev. C. V., Pittsfield, Mass. (29).
Speck, Hon. Charles, St. Louis, Mo. (27).
Speir, Francis, jr., South Orange, N. J. (29).
Spence, Mrs. E. Jane, Springfield, Ohio (30).
Spencer, Geo. S., St. Cloud, Minn. (32).
Sperry, Prof. Lyman B., Northfield, Minn. (32).
SPRAGUE, C. H., Malden, Mass. (29).
Sprague, Chas. J., Globe Nat. Bank, Boston, Mass. (29).

- Sprague, Frank J., care of Thos. A. Edison, No. 65 Fifth Ave., New York, N. Y. (29).
- Stæbner, Fred W., Westfield, Mass. (28).
- Starr, Charles S., M. D., Rochester, N. Y. (31).
- Stearns, Eben S., Chancellor Univ. of Nashville, Nashville, Tenn. (26).
- Stearns, Silas, Assistant U. S. Fish Commission, Pensacola, Fla. (28).
- Stearns, Winfrid Alden, Amherst, Mass. (23).
- Stebbins, James H., jr., 117 Pearl St., New York, N. Y. (31).
- Sterling, Prof. Theodore, Gambier, Ohio (30).
- Sterling, W. S., Clifton, Hamilton Co., Ohio (30).
- Stern, David, care B. Stern, Cincinnati, Ohio (30).
- Stevens, Mrs. Elizabeth R., Lowell, Mass. (32).
- Stevens, Geo. T., M. D., 33 West 33d St., New York, N. Y. (28).
- Stevens, R. P., Jamaica, N. Y. (18).
- Stevenson, James, Ass't Ethnologist, Washington, D. C. (29).
- Stevenson, W. G., M. D., Poughkeepsie, N. Y. (28).
- Stillman, W. O., M. D., Proctorsville, Vt. (28).
- Stillwell, Charles M., Box 1261, New York, N. Y. (30).
- Stimpson, Thomas M., Peabody, Mass. (18).
- Stimson, E. R., Toronto, Ontario (31).
- St. John, Jas. A., St. Louis, Mo. (27).
- Stockbridge, Horace E., Amherst, Mass. (31).
- Stockbridge, Levi, Amherst, Mass. (31).
- Stoddard, John T., Ph. D., Northampton, Mass. (29).
- Stodder, Charles, 131 Devonshire St., Boston, Mass. (29).
- Stone, Mrs. Alfred, Providence, R. I. (31).
- Stone, Henry, cor. Broadway and N St., South Boston, Mass. (31).
- Stone, Rev. James A. B., Detroit, Mich. (31).
- Stone, Leander, Chicago, Ill. (32).
- Stone, Lincoln R., M. D., Newton, Mass. (31).
- Stone, Miss Mary H., Salem, Mass. (25).
- Storer, Dr. D. H., Boston, Mass. (1).
- Stowell, John, 48 Main St., Charlestown, Mass. (21).
- Stowell, Prof. T. B., Cortland, N. Y. (28).
- Strieby, Prof. William, Colorado Springs, Col. (31).
- Studer, Jacob H., Tribune Building, New York, N. Y. (31).
- Stunz, Prof. C. R., Cincinnati, Ohio (29).
- Sullivan, J. A., Malden, Mass. (27).
- Swasey, Oscar F., M.D., Beverly, Mass. (17).
- Sweeny, Dr. R. O., St. Paul, Minn. (32).
- Taft, Alphonso, Cincinnati, Ohio (30).
- Tatum, Jos. T., 221 Chestnut St., St. Louis, Mo. (27).
- Taylor, Frederick W., Smithsonian Institution, Washington, D. C. (31).
- Taylor, Comdr. H. C., U. S. N., Poughkeepsie, N. Y. (30).
- Taylor, James C., care A. R. Ledoux & Co., 17 Cedar St., New York, N. Y. (30).

- Taylor, Thos., M. D., Dept. of Agric., Washington, D. C. (29).
Tepper, Fred., Box 3331, New York, N. Y. (29).
Terry, James, American Museum Natural History, Central Park (77th St. and 8th Ave.), New York, N. Y. (28).
Theobald, Albert G. R., Forest Dept., Anamalai, Coimbatore District, India (27).
Thomas, F. Wolferstan, Montreal, Can. (31).
Thompson, Prof. Chas. O., Terre Haute, Ind. (29).
Thompson, Daniel G., 29 William St., New York, N. Y. (29).
Thompson, David D., Methodist Book Concern, Cincinnati, Ohio (30).
Thompson, Harvey M., 638 West Lake St., Chicago., Ill. (17).
Thompson, J. E., Spalding, Mich. (31).
Thompson, Miss Marie N., 323 Elm St., Cincinnati, Ohio (30).
Thompson, S. A., Minneapolis, Minn. (32).
Thompson, W. W., care Jeffras Seely & Co., Cincinnati, Ohio (30).
Thomson, Prof. A., Ames, Iowa (21).
Thomson, Prof. Henry R., Crawfordsville, Ind. (30).
Thorburn, John, LL. D., Ottawa, Ont., Can. (29).
Thrasher, Allen B., M. D., 94 W. 7th St., Cincinnati, Ohio (30).
Thurber, Miss Elizabeth, Plymouth, Mass. (22).
Tiffany, Asa S., 901 West 5th St., Davenport, Scott Co., Iowa (27).
Tiffin, Mrs. Joseph, jr., cor. Sherbrooke and University Sts., Montreal, Can. (31).
Timby, Theo. R., Nyack, N. Y. (29).
Tittmann, Otto H., U.S. Coast Survey, Washington, D. C. (24).
Todd, Albert, St. Louis, Mo. (27).
Todd, Andrew J., 261 Broadway, New York, N. Y. (29).
Todd, Prof. James E., Tabor, Fremont Co., Iowa (22).
Tolman, James P., West Newton, Mass. (29).
Tomlinson, Dr. J. M., 28½ East Ohio St., Indianapolis, Ind. (20).
Tonnelé, Theodore, 48 E. 68th St., New York, N. Y. (29).
Tonry, Prof. Wm. P., Baltimore, Md. (30).
Torrey, Herbert G., U. S. Assay Office, 30 Wall St., New York, N. Y. (31).
Townsend, Franklin, Adj. Gen. State of N. Y., 4 Elk St., Albany, N. Y. (4).
Townsend, Joseph, Durham, Ontario, Can. (31).
Träber, Jacob, Cincinnati, Ohio (30).
Tracy, Will W., Detroit, Mich. (30).
Treadwell, Geo. A., Phoenix, Arizona (29).
Treat, Erastus B., 757 Broadway, N. Y. (29).
Triplett, Wm. H., M. D., 116 W. 44th St., New York, N. Y. (28).
Trippe, T. Martin, C. E., Howardsville, San Juan Co., Col. (29).
Troop, James, Agricultural College, Lansing, Mich. (31).
Trottier, A. A., Montreal, Can. (31).
Trowbridge, Mrs. L. H., 266 Woodward Ave., Detroit, Mich. (21).
Trowbridge, Luther H., 266 Woodward Ave., Detroit, Mich. (29).

- Trowbridge, S. H., Glasgow, Mo. (27).
 Tucker, Willis G., M. D., Albany, N. Y. (29).
 Tyler, Edward R., Washington, D. C. (31).
 Tyler, John M., Amherst, Mass. (29).

 Upham, Dr. J. Baxter, 31 Chestnut St., Boston, Mass. (14).
 Upton, Francis R., Box 95, Orange, N. J. (28).

 Vail, Prof. Hugh D., Santa Barbara, Cal. (18).
 Valentine, Ferdinand C., M. D., 30 West 11th St., New York, N. Y. (31).
 Van Brunt, C., Poughkeepsie, N. Y. (28).
 Van Tyne, Uriel C. (30).
 Vasey, George, M. D., Washington, D. C. (32).
 Venable, W. H., Station C, Cincinnati, Ohio (30).
 Vermyné, J. J. B., M. D., New Bedford, Mass. (29).
 Very, Lt. S. W., care of Navy Dep't, Washington, D. C. (28).
 Vieth, William, cor. 8th and Freeman Sts., Cincinnati, O. (28).
 Vining, Edward P., Omaha, Neb. (32).
 Vinton, Mrs. Helena Stallo, Indianapolis, Ind. (30).
 Vinton, Lindley, Indianapolis, Ind. (30).
 Vodges, A. W., 1st Lt. Art'y U. S. A., Fortress Monroe, Va. (32).
 Volney, C. W., Ph. D., 52 Wall St., New York, N. Y. (31).
 Voorhees, Chas. H., M. D., P. O. Lock Box 120, New Brunswick, N. J. (29).
 Vredenburgh, Edw. H., Rochester, N. Y. (29).
 Vulté, Hermann T., Ph. B., School of Mines, Columbia College, New York, N. Y. (30).

 Wachsmuth, Charles, Burlington, Iowa (30).
 Wagner, Ferd., 41 W. 5th St., Cincinnati, Ohio (30).
 Wainwright, Ellis, St. Louis, Mo. (29).
 Wait, Prof. Chas. E., Rolla, Mo. (29).
 Waite, Chas. N., Manchester, N. H. (29).
 Wakeman, Thaddeus B., 93 Nassau St., New York, N. Y. (25).
 Walcott, Dr. H. P., Cambridge, Mass. (29).
 Waldstein, Martin E., Ph. D., Union Square, New York, N. Y. (32).
 Walker, Dr. G. S., St. Louis, Mo. (27).
 Walker, George C., 124 La Salle St., Chicago, Ill. (17).
 Walker, N. B. (20)
 Wall, John L., 338 Sixth Avenue, New York, N. Y. (27).
 Wallis, John M., C. E. (32).
 Walter, Hugo (30).
 Walton, James, Barnesville, Belmont Co., Ohio (30).
 Walton, Jos. J., (29).
 Walworth, Rev. Clarence A., Albany, N. Y. (28).
 Walworth, Mrs. Ellen Hardin, Saratoga Springs, N. Y. (28).

- Wanless, John M. D., 88 Union Ave., Montreal, Can. (31).
 Ward, J. Langdon, 120 Broadway, New York, N. Y. (29).
 Ward, Samuel B., M. D., Albany, N. Y. (29).
 Wardwell, George J., Rutland, Vt. (20).
 Waring, Col. George E., jr., Newport, R. I. (29).
 Warnecke, Prof. Carl, 157 St. Constant St., Montreal, Can. (31).
 Warner, Hulbert H., Rochester, N. Y. (31).
 Warner, Mrs. J. D., 199 Baltic St., Brooklyn, N. Y. (21).
 Warnock, James, 33 Warren St., New York, N. Y. (29).
 Warren, G. Washington, 54 Devonshire St., Room 1, Boston, Mass. (18).
 Warren, Joseph W., M. D., 107 Boylston St., Boston, Mass. (31).
 Warren, Samuel D., 220 Devonshire St., Boston, Mass. (29).
 Warren, Mrs. Samuel D., 67 Mt. Vernon St., Boston, Mass. (29).
 Warren, Wm. J., Minneapolis, Minn. (30).
 Washburn, John H., Bridgewater, Mass. (31).
 Waterhouse, Ai, M. D., Jamestown, N. Y. (29).
 Waters, Edwin F., Newton Centre, Mass. (29).
 WATERS, GEO. F., 8 Beacon St., Boston, Mass. (29).
 Waters, Jabez M., 9th and Freeman Sts., Cincinnati, Ohio (30).
 Watson, Miss C. A., Salem, Mass. (31).
 Watt, David A. P., Montreal, Can. (31).
 Weaver, Lemuel, Urbana, Ohio (32).
 Weber, H. C., 17 Mc Limore St., Nashville, Tenn. (30).
 Weed, Walter H., 6 Pine St., New York, N. Y. (31).
 Weeden, Hon. Joseph E., Randolph, N. Y. (31).
 Weist, J. R., M. D., Richmond, Ind. (29).
 Weitbrecht, George, 469 North St., St. Paul, Minn. (32).
 Weld, Mrs. Amy T., 119 East 23rd St., New York, N. Y. (28).
 Weld, W. G., Box 105, Newport, R. I. (23).
 Wells, Mrs. C. F., 753 Broadway, New York, N. Y. (31).
 Wells, Rev. Martin L., Aurora, Ind. (30).
 Wells, Samuel, 31 Pemberton Square, Boston, Mass. (24).
 Wendell, Oliver C., Observatory, Cambridge, Mass. (29).
 Wendte, Rev. C. W., Newport, R. I. (29).
 West, Arthur W., Salem, Mass. (31).
 Wheeler, T. B., M. D., 714 Craig St., Montreal, Canada (11).
 Wheildon, Miss Alice W., Concord, Mass. (31).
 Whetstone, John L., N. W. cor. 8th St., and Eggleston Avenue, Cincinnati, Ohio (30).
 Whitaker, Prof. Channing, Box 524, Lowell, Mass. (29).
 Whitcomb, Wm. W., 106 W. Chester Park, Boston, Mass. (29).
 White, Prof. Charles Joyce, Cambridge, Mass. (29).
 White, Miss Florence, Mills Seminary, Alameda Co., Cal. (29).
 White, Prof. Frances E., Woman's Med. College, Philadelphia, Pa. (29).
 White, Prof. H. C., Univ. of Georgia, Athens, Ga. (29).

- White, LeRoy S., Box 157, Waterbury, Conn. (23).
 White, Thomas W., Hernando, De Soto Co., Miss. (28).
 Whiteaves, J. F., Geological Survey, Ottawa, Can. (31).
 Whitehouse, F. Cope, Brevoort House, New York, N. Y. (31).
 Whiting, Henry L., U. S. C. and G. Survey, West Tisbury, Mass. (29).
 Whitman, Edmund B., 36 Trowbridge St., Cambridge, Mass. (29).
 Whitman, Gilbert P., Manchester, N. H. (30).
 Whitney, Mary W., Waltham, Mass. (19).
 Wicksteed, R. J., LL. D., Ottawa, Province of Ont., Can. (29).
 Wiechmann, F. G., School of Mines, Columbia College, New York, N. Y. (30).
 Wilber, Francis A., Rutgers College, New Brunswick, N. J. (31).
 Wilbour, Mrs. Charlotte B., care J. M. Furley, 74 W. 35th St., New York, N. Y. (28).
 Wilcox, Mary A., Newnham College, Cambridge, Eng. (29).
 Wilcox, W. A., Sec'y Boston Fish Bureau, 176 Atlantic Avenue, Boston, Mass. (29).
 Wilder, Alex., M. D., 567 Orange St., Newark, N. J. (29).
 Wilder, Graham, Louisville, Ky. (30).
 Wilkinson, Mrs. L. V., Brazeau P. O., Perry Co., Mo. (30).
 Willetts, Joseph C., Skaneateles, N. Y. (29).
 Williams, David, 83 Reade St., New York, N. Y. (29).
 Williams, Mrs. Drue T., Greensburg, Decatur Co., Ind. (30).
 Williams, Dr. E., 64 W. 7th St., Cincinnati, Ohio (30).
 Williams, E. B., Strawberry Point, Iowa (24).
 Williams, Prof. Edward H., jr., Box 463, Bethlehem, Pa. (25).
 Williams, F. H., M. D., 100 Boylston St., Boston, Mass. (29).
 Williams, Frank, Buffalo, N. Y. (25).
 Williams, G. Henry, Baltimore, Md. (30).
 Williams, J. Francis, Salem, N. Y. (31).
 Williams, Janet W., Newton Lower Falls, Mass. (31).
 WILLIAMS, P. O., M.D., Watertown, Jefferson Co., N. Y. (24).
 Williams, Rev. R. R., Canajoharie, Montgomery Co., N. Y. (28).
 Williamson, Prof. Andrew W., Rock Island, Ill. (32).
 Willoughby, Hugh L., Saratoga Springs, N. Y. (28).
 Wills, William R., Waltham, Mass. (30).
 Willson, Robert W., care Rev. E. B. Willson, Salem, Mass. (30).
 Willson, Z. G. (32).
 Wilmot, Thos. J., Direct U. S. Cable Co., Rye, N. H. (27).
 Wilson, C. H., Rugby, Tenn. (30).
 Wilson, H. C., Mt. Lookout, Hamilton Co., Ohio (30).
 Wilson, Horace E., 1514 10th St. N., Minneapolis, Minn. (32).
 Wilson, M. C., Florence, Ala. (26).
 Wilson, Prof. P. B., 44 Second St., Baltimore, Md. (30).
 Wingate, Miss Hannah S., 208 Raymond St., Brooklyn, N. Y. (31).
 Winslow, Sam'l W., Room 30, Rialto Building, 131 Devonshire, cor. Milk St., Boston, Mass. (29).

- Winston, Prof. Chas. H., Richmond College, Richmond, Va. (30).
Witherbee, Frank S., care Witherbees, Sherman & Co., Port Henry, N. Y. (29).
Wolcott, Mrs. Henrietta L. T., Dedham, Mass. (29).
WOOD, DR. ROBERT W., Jamaica Plain, Mass. (29).
Wood, Dr. Wm., Portland, Me. (29).
Woodbury, C. J. H., 131 Devonshire St., Boston, Mass. (29).
Woodward, Calvin M., St. Louis, Mo. (32).
Woodward, J. J., M. D., Army Medical Museum, Washington. D. C. (28).
Woodward, Richard W., South Pueblo, Col. (29).
Woolman, Geo. S., 116 Fulton St., New York, N. Y. (29).
Worthen, T. W. D., Hanover, N. H. (28).
WRIGHT, ELIZUR, Box 109, Boston, Mass. (31).
Wright, Harrison, Sec'y Wyoming Hist. and Geol. Soc., Wilkes Barré, Pa. (29).
Würtele, Miss Minnie, Acton Vale, P. Q., Can. (32).
Wylie, Samuel B., 924 Chestnut St., Philadelphia, Pa. (30).

Youmans, Wm. Jay, M. D., Popular Science Monthly, 549 Broadway, New York, N. Y. (28).
Young, Prof. Andrew H., Hanover, Ind. (30).

Zimmerman, Charles D., Buffalo, N. Y. (30).
Zimmerman, William, Room 22, 142 Dearborn St., Chicago, Ill. (30).
Zinke, E. Gustav, M. D., Elm St., near 14th, Cincinnati, Ohio (30).
Zwick, G. A., 11th and Madison Sts., Covington, Ky. (30).

[1439 MEMBERS.]

NOTE.—The omission of an address in the foregoing list indicates that letters directed to that last printed were returned as uncalled for. Information of the present address of the members so indicated is requested by the PERMANENT SECRETARY.

HONORARY FELLOW.¹

*ROGERS, PROF. WILLIAM B., 117 Marlborough St., Boston, Mass. (1). 1881.

FELLOWS.²

- Abbe, Prof. Cleveland, Washington, D. C. (16). 1874.
 Abbott, Dr. Chas. C., Trenton, N. J. (29). 1883.
 Alexander, John S., 1935 Arch St., Philadelphia, Pa. (20). 1874.
 Allen, Dr. Harrison, 117 South 20th St., Philadelphia, Pa. (29). 1882.
 Allen, Joel A., Mus. Comp. Zoology, Cambridge, Mass. (18). 1875.
 Alvord, Benj., Brig. Gen., U. S. Army, 1207 Q St., N. W., Washington, D. C. (17). 1874.
 Alvord, Henry E., C. E., Houghton Farm, Mountainville, Orange Co., N. Y. (29). 1882.
 Anderson, Dr. Joseph, Waterbury, Conn. (29). 1883.
 Anthony, Prof. Wm. A., Cornell Univ., Ithaca, N. Y. (28). 1880.
 Appleton, Prof. John H., Brown Univ., Providence, R. I. (22). 1874.
 Arthur, J. C., Charles City, Iowa (21). 1883.
 Ashburner, Charles A., 907 Walnut St., Philadelphia, Pa. (31). 1883.
 Ashburner, Wm., 1014 Pine St., San Francisco, Cal. (29). 1882.
 Atkinson, Edward, 131 Devonshire St., Boston, Mass. (29). 1881.
 Atwater, Prof. W. O., Wesleyan Univ., Middletown, Conn. (29). 1882.
 Austen, Peter T., Ph. D., Rutgers College, Lock Box No. 2, New Brunswick, N. J. (26). 1879.
 Austin, E. P., 80 E. Brookline St., Boston, Mass. (18). 1874.
 Bailey, Prof. Loring W., University of Fredericton, N. B. (18). 1875.
 Bailey, Prof. W. W., Brown University, Providence, R. I. (18). 1874.
 Baird, Prof. S. F., Sec'y Smithsonian Inst., Washington, D. C. (1). 1875.
 Baker, Marcus, Coast Survey Office, Washington, D. C. (30). 1882.
 Ballou, Geo. F., Hartford, Conn. (29). 1881.
 Bandelier, Ad. F., Highland, Ill. (25). 1879.
 BARKER, PROF. G. F., Univ. of Penn., Philadelphia, Pa. (13). 1875.
 Barnard, Edward E., Vanderbilt Univ. Observ., Nashville, Tenn. (26). 1883.
 Barnard, F. A. P., President Columbia College, New York, N. Y. (7). 1874.
 Barnard, Prof. Wm. S., U. S. Dept. Agric., Washington, D. C. (24). 1880.
 Bartlett, Prof. Edwin J., Dartmouth College, Hanover, N. H. (28). 1883.
 Bartlett, J. R., Comd'r U. S. N., care of C. & G. Survey Office, Washington, D. C. (30). 1882.

¹ See ARTICLE VI of the Constitution. ² See ARTICLE IV of the Constitution.

*₄ * The number in parenthesis indicates the meeting at which the member joined the Association; the date at the end of the line the time when made a Fellow.

When the name is given in small capitals, it designates that the Fellow is also a life member, and is entitled to the Annual Volume of Proceedings.

* Deceased.

- Bassett, Homer F., Waterbury, Conn. (23). 1874.
 Batchelder, Dr. J. H., Salem, Mass. (18). 1874.
 Batchelder, John M., 3 Divinity Avenue, Cambridge, Mass. (8). 1875.
 Bausch, Edward, Rochester, N. Y. (26). 1883.
 Beal, Prof. Wm. James, Agricultural College, Lansing, Mich. (24). 1880.
 Belknap, George E., Capt. U. S. N., care Fred. L. Wheeler & Co., Box 3522, Boston, Mass. (29). 1881.
 Bell, Dr. Alex. Graham, Scott Circle, 1500 Rhode Island Ave., Washington, D. C. (26). 1879.
 Bell, Samuel N., Manchester, N. H. (7). 1874.
 Bessey, Prof. C. E., Agricultural College, Ames, Iowa (21). 1880.
 Bethune, Rev. C. J. S., Trinity Coll. School, Pt. Hope, Canada (18). 1875.
 Bickmore, Prof. Albert S., American Museum of Natural History, Central Park, New York, N. Y. (17). 1880.
 Billings, John S., Surgeon U. S. A., Washington, D. C. (32). 1883.
 Blackham, George E., M. D., Dunkirk, N. Y. (25). 1883.
 Blair, Henry W., U. S. C. & G. Survey Office, Washington, D. C. (26). 1882.
 Blake, Clarence J., M. D., Hotel Berkeley, Boston, Mass. (24). 1877.
 Blake, Eli W., New Haven, Conn. (1). 1874.
 Blake, Prof. Eli W., jr., Providence, R. I. (15). 1874.
 Blake, Francis, Auburndale, Mass. (23). 1874.
 BOLTON, DR. H. CARRINGTON, Trinity Coll., Hartford, Conn. (17). 1875.
 Borden, Spencer, Fall River, Mass. (29). 1882.
 Boss, Prof. Lewis, Director Dudley Observ., Albany, N. Y. (26). 1878.
 Bouvé, Thos. T., Pres't Boston Soc. Nat. Hist., Boston, Mass. (1). 1875.
 Bowditch, Prof. H. P., Harvard Med. School, Boston, Mass. (28). 1880.
 Bowditch, Henry I., M.D., 113 Boylston St., Boston, Mass. (2). 1875.
 Bowser, Prof. E. A., Rutgers College, New Brunswick, N. J. (28). 1881.
 Brackett, Prof. C. F., College of New Jersey, Princeton, N. J. (19). 1875.
 Breneman, A. A., Ithaca, N. Y. (20). 1880.
 Brewer, Prof. Wm. H., New Haven, Conn. (20). 1875.
 Britton, N. L., Columbia College, New York, N. Y. (29). 1882.
 Broadhead, Garland Carr, Pleasant Hill, Cass Co., Mo. (27). 1879.
 Brooks, Major Thomas B., Geol. State Surveys, Mich. and Wis., Newburgh, N. Y. (26). 1879.
 Bross, Hon. Wm., Chicago, Ill. (7). 1874.
 Broun, Prof. W. LeRoy, Vanderbilt Univ., Nashville, Tenn. (25). 1877.
 Brown, Robert, jr., care of Yale College Observatory, New Haven, Conn. (11). 1874.
 Brown, Mrs. Robert, jr., New Haven, Conn. (17). 1874.
 BRUSH, PROF. GEORGE J., Yale College, New Haven, Conn. (4). 1874.
 Buckhout, W. A., State College, Centre Co., Pa. (20). 1881.
 Burgess, Edward, Sec. Natural History Soc., Boston, Mass. (22). 1877.
 Burnham, S. W., 52 Vincennes Ave., Chicago, Ill. (25). 1877.
 Burr, Prof. William H., Troy, N. Y. (31). 1883.
 Burrill, Prof. T. J., Illinois Industrial Univ., Champaign, Ill. (29). 1882.

- Caldwell, Prof. Geo. C., Cornell University, Ithaca, N. Y. (23). 1875.
- Call, Prof. R. Ellsworth, David City, Neb. (29). 1882.
- Canby, Wm. M., 1101 Delaware Avenue, Wilmington, Del. (17). 1878.
- Carhart, Prof. Henry S., Evanston, Ill. (29). 1881.
- Carmichael, Prof. Henry, Bowdoin College, Brunswick, Me. (21). 1875.
- Carpenter, Lieut. W. L., U. S. A., Dunkirk, N. Y. (24). 1877.
- Carpmael, Charles, Director of Magnetic Observatory, Toronto, Can. (31). 1883.
- Carr, Lucien, Peab. Mus. Arch. and Ethn., Cambridge, Mass. (25). 1877.
- Case, Col. Theo. S., Ed. Western Review of Science, Kansas City, Mo. (27). 1883.
- Chamberlin, T. C., Beloit College, Beloit, Wis. (21). 1877.
- Chandler, Prof. C. F., School of Mines, Columbia Coll., 50th St., cor. 4th Ave., New York, N. Y. (19). 1875.
- Chandler, Prof. Charles Henry, Ripon, Wis. (28). 1883.
- Chandler, Seth C., jr., Harvard Observatory, Cambridge, Mass. (29). 1882.
- Chandler, Prof. W. H., The Lehigh Univ., Bethlehem, Pa. (19). 1874.
- Chanute, O., care Erie Railway, New York, N. Y. (17). 1877.
- Chesbrough, E. S., Chicago, Ill. (2). 1877.
- Chester, Prof. Albert H., Hamilton College, Clinton, N. Y. (29). 1882.
- Chickering, Prof. J. W., jr., Deaf Mute College, Washington, D. C. (22). 1877.
- Chittenden, Russell H., Ph. D., 95 Humphrey St., New Haven, Conn. (29). 1882.
- Clapp, Miss Cornelia M., Mt. Holyoke Seminary, South Hadley, Mass. (31). 1883.
- Clark, Alvan G., Cambridgeport, Mass. (28). 1880.
- Clark, Prof. John E., Mathematics, Yale College, New Haven, Conn. (17). 1875.
- Clarke, Prof. F. W., U. S. Geological Survey, Washington, D. C. (18). 1874.
- Claypole, Prof. Edw. W., B. A., Buchtel Coll., Akron, Ohio. (30). 1882.
- Coffin, Prof. John H. C., U. S. Navy, Washington, D. C. (1). 1874.
- Coffin, Prof. Selden J., Ph.D. Lafayette College, Easton, Pa. (22). 1874.
- Collett, Prof. John, Chief Indiana Bureau of Statistics of Geology, Indianapolis, Ind. (17). 1874.
- Collier, Peter, Dept. of Agric., Washington, D. C. (29). 1882.
- Colvin, Verplanck, Supt. N. Y. State Adirondack Survey, Albany, N. Y. (28). 1880.
- Comstock, J. Henry, Cornell Univ., Ithaca, N. Y. (28). 1882.
- Comstock, Milton L., Prof. Math., Knox Coll., Galesburg, Ill. (21). 1874.
- Cook, Prof. A. J., Agricultural College, Lansing, Mich. (24). 1880.
- Cook, Prof. George H., New Brunswick, N. J. (4). 1875.
- Cooley, Prof. Le Roy C., Vassar College, Poughkeepsie, N. Y. (19). 1880.
- Cope, Prof. Edward D., 2100 Pine St., Philadelphia, Pa. (17). 1875.
- Cox, Prof. Edward T., New Harmony, Ind. (19). 1874.

- Cox, Hon. Jacob D., 103 Broadway, Cincinnati, Ohio (30). 1881.
- Coxe, Eckley B., Drifton, Luzerne Co., Pa. (23). 1879.
- Crandall, Prof. A. R., Lexington, Ky. (29). 1883.
- Crocker, Susan E., M. D., Lawrence, Mass. (21). 1874.
- Crosby, Wm. O., Mass. Inst. Technology, Boston, Mass. (29). 1881.
- Cross, Prof. Chas. R., Mass. Inst. Technology, Boston, Mass. (29). 1880.
- Cummings, Rev. Joseph, D. D., Pres. Northwestern Univ., Evanston, Ill. (13). 1874.
- Cutting, Hiram A., M. D., State Geologist, Lunenburg, Vt. (17). 1874.
- Dabney, Chas. W., jr., Ph. D., Agric. Experiment Station, Raleigh, N. C. (30). 1882.
- Dall, Mrs. Caroline H., 31st St., Washington, D. C. (18). 1874.
- Dall, Wm. H., Smithsonian Institution, Washington, D. C. (18). 1874.
- Dana, Edward Salisbury, New Haven, Conn. (23). 1875.
- Dana, Prof. James D., New Haven, Conn. (1). 1875.
- Danforth, Edward, Dep't of Public Instruction, Elmira, N. Y. (11). 1874.
- Davenport, B. F., M. D., 751 Tremont St., Boston, Mass. (29). 1883.
- Davidson, Prof. Geo., Asst. Coast and Geodetic Survey, San Francisco, Cal. (29). 1881.
- Dawson, Dr. J. W., Principal McGill Coll., Montreal, Canada (10). 1875.
- Day, F. H., M. D., Wauwatosa, Wis. (20). 1874.
- Dean, George W., U. S. P. O. Box 92, Fall River, Mass. (15). 1874.
- Dimmock, George, Cambridge, Mass. (22). 1874.
- Dinwiddie, Robert, 117 W. 43d St., New York, N. Y. (1). 1874.
- Dodge, Charles R., Washington, D. C. (22). 1874.
- Dolbear, A. Emerson, College Hill, Mass. (20). 1880.
- Dorsey, Rev. J. Owen, Bureau of Ethnology, Washington, D. C. (31). 1883.
- Draper, Dan'l, Ph.D., Director N. Y. Meteorological Observatory, Central Park, 64th St., Fifth Avenue, New York, N. Y. (29). 1881.
- Drown, Prof. Thos. M., Lafayette College, Easton, Pa. (29). 1881.
- Du Bois, Prof. Aug. J., New Haven, Conn. (30). 1882.
- Dudley, Charles B., Altoona, Pa. (23). 1882.
- Dudley, Wm. L., Miami Med. College, Cincinnati, Ohio (28). 1881.
- Dudley, Prof. Wm. R., Ithaca, N. Y. (29). 1883.
- Dunnington, Prof. F. P., University of Virginia, Va. (26). 1880.
- Dutton, Capt. C. E., U. S. Ord. Dep't, Washington, D. C. (23). 1875.
- Dwight, Prof. Wm. B., Vassar College, Poughkeepsie, N. Y. (30). 1882.
- Dwyer, John, M. D., Hartford, Conn. (23). 1874.
- Eads, Jas. B., 314 Chestnut Street, St. Louis, Mo. (27). 1879. [1879.
- Eastman, Prof. J. R., U. S. Naval Observatory, Washington, D. C. (26).
- Eaton, Prof. D. G., Experiment Mills, Monroe Co., Pa. (19). 1874.
- Eaton, Hon. John, U. S. Commissioner of Education, Washington, D. C. (25). 1883.
- Eddy, Prof. H. T., University of Cincinnati, Cincinnati, O. (24). 1875.
- Edison, Thos. A., Menlo Park, N. J. (27). 1878.

- Edmands, J. Rayner, Observatory, Cambridge, Mass. (29). 1880.
- Egleston, Prof. Thos., School of Mines, Columbia College, New York, N. Y. (27). 1879.
- Eimbeck, Wm., U. S. C. S., Washington, D. C. (17). 1874.
- Elliott, Arthur H., School of Mines, Columbia College, New York, N. Y. (23). 1880.
- Elliott, Ezekiel B., Government Actuary, Treasury Dept., Washington, D. C. (10). 1874.
- Elsberg, Louis, M. D., 614 Fifth Avenue, New York, N. Y. (23). 1874.
- Emerson, Prof. Benjamin K., Amherst, Mass. (19). 1877.
- Emerson, Prof. C. F., Dartmouth College, Hanover, N. H. (22). 1874.
- Emerton, James H., Salem, Mass. (18). 1875.
- Emmons, S. F., P. O. Box 591, Washington, D. C. (26). 1879.
- Engelmann, Geo. J., M. D., 3003 Locust St., St. Louis, Mo. (25). 1878.
- Ernst, Carl W., Daily Advertiser, Boston, Mass. (23). 1874.
- Eustis, Prof. Henry L., Cambridge, Mass. (2). 1874.
- Evans, Asher B., Principal Union School, Lockport, N. Y. (19). 1874.
- Fairbanks, Henry, Ph. D., St. Johnsbury, Vt. (14). 1874.
- Fairchild, H. L., 102 E. 52d St., New York, N. Y. (28). 1883.
- Farlow, Dr. W. G., 6 Park Square, Boston, Mass. (20). 1875.
- Farmer, Moses G., Torpedo Station, Newport, R. I. (9). 1875.
- Farquharson, Dr. Robert James, Des Moines, Iowa (24). 1880.
- Ferguson, Maj. Thos. B., Ass't U. S. Fish Commissioner, Washington, D. C. (28). 1881.
- Fernald, Prof. Chas. H., State Agricultural College, Orono, Me. (22). 1881.
- Fernald, Prof. M. C., State Agricultural College, Orono, Me. (22). 1883.
- Ferrel, Wm., U. S. Coast Survey Office, Washington, D. C. (11). 1875.
- Ficklin, Prof. Joseph, Univ. of Missouri, Columbia, Mo. (20). 1878.
- Fitch, Edward H., Jefferson, Ashtabula Co., Ohio (11). 1874.
- Fletcher, Miss Alice C., care Peabody Museum, Cambridge, Mass. (29). 1883.
- Fletcher, James, Library of Parliament, Ottawa, Can. (31). 1883.
- Fletcher, Dr. Robert, Surgeon General's Office, Washington, D. C. (29). 1881.
- Flint, James M., Surgeon U. S. N., 42 Dartmouth St., Boston, Mass. (28). 1882.
- Foote, Dr. A. E., 1223 Belmont Avenue, Philadelphia, Pa. (21). 1874.
- Forbes, Prof. S. A., Normal, Ill. (27). 1879.
- FRAZER, DR. PERSIFOR, 201 South 5th St., Philadelphia, Pa. (24). 1879.
- Frazier, Prof. B. W., The Lehigh University, Bethlehem, Pa. (24). 1882.
- Freeman, H. C., Alto Pass, Union Co., Ill. (17). 1876.
- Freeman, Spencer H., Adelkert College, Cleveland, Ohio (29). 1883.
- French, Prof. Thomas, jr., Univ. of Cincinnati, Cincinnati, Ohio (30). 1883.
- Frisby, Prof. Edgar, U. S. N. Observ., Washington, D. C. (28). 1880.

- Fuller, Andrew S., Ridgewood, Bergen Co., N. J. (24). 1882.
- Gage, Simon Henry, Ithaca, N. Y. (28). 1881.
- Gardiner, Rev. Frederic, D. D., Middletown, Conn. (23). 1874.
- Gardiner, James T., Director N. Y. State Survey, Albany, N. Y. (25). 1879.
- Garland, Rev. Dr. L. C., Chancellor Vanderbilt Univ., Nashville, Tenn. (25). 1877.
- Garman, S., Museum Comp. Zoology, Cambridge, Mass. (20). 1874.
- Gatschet, Albert S., Bureau of Ethnology, Washington, D. C. (30). 1882.
- Genth, Prof. F. A., Univ. of Pennsylvania, Philadelphia, Pa. (24). 1875.
- Gilbert, G. K., Box 240, Salt Lake City, Utah (18). 1874.
- Gillman, Henry, 155 Adams Avenue East, Detroit, Mich. (24). 1875.
- Gilman, Daniel C., Pres. Johns Hopkins Univ., Baltimore, Md. (10). 1875.
- Goessman, Prof. C. A., Mass. Agric. Coll., Amherst, Mass. (18). 1875.
- Goldschmidt, S. A., Ph. D., Morse Building, 140 Nassau St., New York, N. Y. (24). 1880.
- Gooch, Frank A., U. S. Geological Survey, Newport, R. I. (25). 1875.
- Goodale, Prof. G. L., Botanic Gardens, Cambridge, Mass. (18). 1875.
- Goode, Prof. G. Brown, Curator National Museum, Washington, D. C. (22). 1874.
- Goodfellow, Edward, Ass't U. S. Coast and Geodetic Survey, Washington, D. C. (24). 1879.
- Grant, Mrs. Mary J., Brookfield, Conn. (23). 1874.
- Gray, Prof. Asa, Botanic Gardens, Cambridge, Mass. (1). 1875.
- Gray, Elisha, Ph. D., Highland Park, Ill. (32). 1883.
- Green, Traill, M. D., Easton, Pa. (1). 1874.
- Grimes, J. Stanley, 406 Sycamore St., Milwaukee, Wis. (17). 1874.
- Grote, Aug. R., New Brighton, Staten Island, N. Y. (22). 1875.
- Gulley, Prof. Frank A., Agricultural College, Oktibbeha Co., Miss. (30). 1883.
- Hagen, Dr. Hermann A., Mus. Comp. Zool., Cambridge, Mass. (17). 1875.
- Hague, Arnold, 10 West 29th St., New York, N. Y. (26). 1879.
- Hale, Horatio, Clinton, Ontario, Can. (30). 1882.
- Hall, Prof. Asaph, U. S. Naval Observ., Washington, D. C. (25). 1877.
- Hall, Prof. C. W., Univ. of Minnesota, Minneapolis, Minn. (28). 1883.
- Hall, Edwin H., Johns Hopkins Univ., Baltimore, Md. (29). 1881.
- Hall, Prof. James, Albany, N. Y. (1). 1875.
- Hamlin, Dr. A. C., Bangor, Me. (10). 1874.
- HANAMAN, C. E., Troy, N. Y. (19). 1883.
- Hardy, Prof. A. S., Dartmouth College, Hanover, N. H. (28). 1883.
- Harger, Oscar, Yale College Museum, New Haven, Conn. (25). 1879.
- HARKNESS, PROF. WM., U. S. N., U. S. Observatory, Washington, D. C. (26). 1878.
- Harrington, Prof. Mark W., Ann Arbor, Mich. (22). 1875.
- Harrison, Dr. B. F., Wallingford, Conn. (11). 1874.
- Hasbrouck, Prof. I. E., Rutgers Coll., New Brunswick, N. J. (23). 1874.

- Haskins, Rev. David Greene, Cambridge, Mass. (25). 1874.
- Hastings, C. S., Johns Hopkins University, Baltimore, Md. (25). 1878.
- Hayden, Dr. F. V., 1910 Arch St., Philadelphia, Pa. (29). 1881.
- Hazen, Brig. Gen. Wm. B., Chief Signal Office, U. S. A., Washington, D. C. (30). 1882.
- Hedrick, B. S., Exam'r U. S. Patent Office, Washington, D. C. (19). 1874.
- Henderson, John G., Winchester, Ill. (25). 1879.
- Henshaw, Henry W., Care Major J. W. Powell, 910 M St., Washington, D. C. (24). 1877.
- Hervey, Rev. A. B., Taunton, Mass. (22). 1879.
- Hilgard, Prof. E. W., Univ. of California, Berkeley, Cal. (11). 1874.
- Hilgard, Prof. J. E., U. S. Coast Survey, Washington, D. C. (4). 1874.
- Hill, Franklin C., P. O. Box 338, Princeton, N. J. (29). 1881.
- Hill, George W., Nautical Almanac Office, Navy Department, Washington, D. C. (23). 1874.
- Hill, Rev. Dr. Thomas, 738 Congress St., Portland, Me. (3). 1875.
- Himes, Prof. Charles F., Carlisle, Pa. (29). 1882.
- Hinrichs, Prof. Gustavus, State University, Iowa City, Iowa (17). 1874.
- Hitchcock, Prof. Charles H., Hanover, N. H. (11). 1874.
- Hitchcock, Romyn, Washington, D. C. (29). 1881.
- Hodges, N. D. C., Salem, Mass. (29). 1882.
- Hoffman, Dr. Fred., 183 Broadway, New York, N. Y. (28). 1881.
- Holden, Prof. E. S., Director Washburn Observatory, Univ. of Wisconsin, Madison, Wis. (23). 1875.
- Holman, Silas W., Mass. Inst. of Technology, Boston, Mass. (31). 1883.
- Holmes, Dr. Oliver Wendell, 296 Beacon St., Boston, Mass. (29). 1881.
- Holmes, Wm. H., Smithsonian Institution, Washington, D. C. (30). 1883.
- Horsford, Prof. E. N., Cambridge, Mass. (1). 1876.
- Hosea, Lewis M., Johnston Building, Cincinnati, Ohio (30). 1883.
- Hotchkiss, Jed., Staunton, Va. (31). 1883.
- Hough, Franklin B., Lowville, N. Y. (4). 1874.
- Hough, G. W., Director Dearborn Observatory, Chicago, Ill. (15). 1874.
- Hovey, Rev. Horace C., Minneapolis, Minn. (29). 1883.
- Hoy, Philo R., M. D., Racine, Wis. (17). 1875.
- Hunt, George, Providence, R. I. (9). 1874.
- Hunt, Dr. T. Sterry, Montreal, Canada (1). 1874.
- Huntington, Prof. J. H., Boston, Mass. (19). 1874.
- Hyatt, Prof. Alpheus, Natural History Society, Boston, Mass. (18). 1875.
- Hyatt, James, Stanfordville, Dutchess Co., N. Y. (10). 1874.
- Hyde, Prof. E. W., Walnut Hills, Cincinnati, Ohio (25). 1881.
- James, Jos. F., 177 Race St., Cincinnati, Ohio (30). 1882.
- Jeffries, B. Joy, M. D., 15 Chestnut St., Boston, Mass. (29). 1881.
- Jenks, Elisha T., Middleborough, Mass. (22). 1874.
- Jenks, Prof. J. W. P., Middleborough, Mass. (2). 1874.

- Jewell, Theo. F., Lt. Comdr. U. S. N., Torpedo Station, Newport, R. I. (25). 1882.
- Jillson, Dr. B. C., Illinois Industrial Univ., Champaign, Ill. (14). 1881.
- Johnson, Prof. S. W., Sheffield Sci. School, New Haven, Conn. (22). 1874.
- Johnson, Prof. W. W., Annapolis, Md. (29). 1881.
- Joy, Prof. Charles A., care F. Hoffmann, Stockbridge, Mass. (8). 1879.
- Julien, A. A., School of Mines, Columbia Coll., New York, N. Y. (24). 1875.
- Kedzie, Prof. Robert C., Lansing, Mich. (29). 1881.
- Kellicott, David S., Buffalo, N. Y. (31). 1883.
- Kendall, Prof. E. Otis, 3826 Locust St., Philadelphia, Pa. (29). 1882.
- Kennan, George, 1318 Mass. Avenue, Washington, D. C. (30). 1882.
- Kent, William, 30 Cortlandt St., New York, N. Y. (26). 1881.
- Kerr, Prof. W. C., Raleigh, N. C. (10). 1874.
- Kershner, Prof. Jefferson E., Lancaster City, Pa. (29). 1883.
- Kinnicutt, Leonard P., 5 Chestnut St., Worcester, Mass. (28). 1883.
- Kirkwood, Prof. Daniel, Bloomington, Ind. (7). 1874.
- Kunz, G. F., care Tiffany and Co., New York, N. Y. (29). 1883.
- Lambert, Rev. Thomas R., D.D., Charlestown, Mass. (18). 1874.
- Landreth, Prof. Olin H., Vanderbilt Univ., Nashville, Tenn. (28). 1883.
- Langdon, Dr. F. W., 65 West 7th St., Cincinnati, Ohio (30). 1882.
- Langley, Prof. J. W., Univ. of Michigan, Ann Arbor, Mich. (23). 1875.
- Langley, Prof. S. P., Director of Observatory, Allegheny, Pa. (18). 1874.
- Lanza, Prof. Gaetano, Mass. Inst. of Technology, Boston, Mass. (29). 1882.
- Larkin, Edgar L., New Windsor, Mercer Co., Ill. (28). 1883.
- Lattimore, Prof. S. A., Univ. of Rochester, Rochester, N. Y. (15). 1874.
- Lawrence, George N., 45 E. 21st St., New York, N. Y. (7). 1877.
- Lazenby, Prof. Wm. R., Ithaca, N. Y. (30). 1882.
- Lea, Dr. Isaac, 1622 Locust St., Philadelphia, Pa. (1). 1875.
- LeConte, Prof. Joseph, Univ. of Cal., Berkeley, Cal. (29). 1881.
- Ledoux, Albert R., Ph. D., 17 Cedar St., New York, N. Y. (26). 1881.
- Leeds, Prof. Albert R., Stevens Institute, Hoboken, N. J. (23). 1874.
- Leonard, N. R., State Univ., Iowa City, Iowa (21). 1875.
- Lesley, Prof. J. Peter, State Geol. of Pa., 1008 Clinton St., Philadelphia, Pa. (2). 1874.
- Lewis, Prof. H. Carvill, E. Washington Lane, Germantown, Pa. (26). 1880.
- LILLY, GEN. WM., Mauch Chunk, Carbon Co., Pa. (28). 1882. Patron.
- Lindsley, Dr. J. Berrien, Nashville, Tenn. (1). 1874.
- Lintner, J. A., N. Y. State Entomologist, Room 27, Capitol, Albany, N. Y. (22). 1874.
- Little, W. C., Albany, N. Y. (22). 1874.
- Litton, Abram, Washington University, St. Louis, Mo. (28). 1879.
- Lockwood, Rev. Samuel, Freehold, Monmouth Co., N. J. (18). 1875.
- Loomis, Prof. Elias, New Haven, Conn. (1). 1874.
- Lord, Prof. Nat. W., State Univ., Columbus, Ohio (29). 1881.

- Loudon, Prof. James, Toronto, Can. (25). 1881.
- Loughridge, Prof. R. H., Ass't State Geol., Frankfort, Ky. (21). 1874.
- Love, Edward G., School of Mines, Columbia College, New York, N. Y. (24). 1882.
- Lovering, Prof. Joseph, Harvard University, Cambridge, Mass. (2). 1875.
- Lull, Edward P., Captain U. S. N., Navy Yard, Boston, Mass. (28). 1880.
- Lupton, Prof. N. T., Vanderbilt University, Nashville, Tenn. (17). 1874.
- Lyle, David Alexander, Capt. of Ordnance U. S. A., National Armory, Springfield, Mass. (28). 1880.
- Lyman, Prof. Chester S., New Haven, Conn. (4). 1875.
- Lyman, Hon. Theodore, Brookline, Mass. (23). 1875.
- Lyon, Dr. Henry, 34 Monument Sq., Charlestown, Mass. (18). 1874.
- Mabery, Prof. C. F., Case School of Applied Science, Cleveland, Ohio (29). 1881.
- Macfarlane, James, Towanda, Pa. (29). 1882.
- Mackintosh, James B., School of Mines, Columbia College, New York, N. Y. (27). 1883.
- Macloskie, Prof. George, College of New Jersey, Princeton, N. J. (25). 1882.
- Mallery, Brevet Lieut. Col. Garrick, U. S. Army, Box 585, Washington, D. C. (26). 1879.
- MANN, B. PICKMAN, U. S. Dep't of Agric., Washington, D. C. (22). 1874.
- Marcy, Oliver, LL.D., Evanston, Ill. (10). 1874.
- Mark, Edw. L., 48 Shepard St., Cambridge, Mass. (21). 1879.
- Markoe, Geo. F. H., 61 Warren St., Roxbury, Mass. (29). 1881.
- MARSH, PROF. O. C., Yale College, New Haven, Conn. (15). 1874.
- Martin, Prof. Daniel S., Rutgers Female College, New York, N. Y. (23). 1879.
- Martin, Prof. H. Newell, Johns Hopkins Univ., Baltimore, Md. (27). 1880.
- Mason, Prof. Otis T., Columbian University, Washington, D. C. (25). 1877.
- Mayer, Prof. A. M., So. Orange, N. J. (19). 1874.
- McCauley, Capt. C. A. H., Ass't Q. M., U. S. A., 321 Michigan Ave., Chicago, Ill. (29). 1881.
- McGee, W. J., U. S. Geol. Survey, Washington, D. C. (27). 1882.
- McMurtrie, William, Ill. Indust. Univ., Champaign, Ill. (22). 1874.
- McNair, Lt. Commander Antoine R., U. S. N., Box 1071, Saratoga Springs, N. Y. (28). 1882.
- McRae, Hamilton S., Supt. of Schools, Marion, Ind. (20). 1874.
- Meehan, Thomas, Germantown, Pa. (17). 1875.
- Mees, Carl Leo, Columbus, Ohio (24). 1876.
- Mendenhall, Prof. T. C., Columbus, Ohio (20). 1874.
- Merriman, C. C., Rochester, N. Y. (29). 1880.
- Michelson, A. A., Master U. S. N., Nautical Almanac Office, Washington, D. C. (26). 1879.
- Minot, Dr. Charles Sedgwick, 25 Mt. Vernon St., Boston, Mass. (28). 1880.

- Mitchell, Miss Maria, Vassar College, Poughkeepsie, N. Y. (4). 1874.
Mixer, Prof. Wm. G., New Haven, Conn. (30). 1882.
Moore, Prof. J. W., M. D., Lafayette College, Easton, Pa. (22). 1874.
Morley, Prof. Edward W., 749 Republic St., Cleveland, Ohio (18). 1876.
Morris, Rev. John G., Baltimore, Md. (12). 1874.
Morse, Prof. E. S., Salem, Mass. (18). 1874.
Morton, H., Stevens Institute Technology, Hoboken, N. J. (18). 1875.
Moses, Prof. Thos. F., Urbana Univ., Urbana, Ohio (25). 1883.
Munroe, Prof. C. E., U. S. Naval Academy, Annapolis, Md. (22). 1874.
Murtfeldt, Miss Mary E., Kirkwood, Mo. (27). 1881.
- Nason, Prof. H. B., Rensselaer Polytechnic Inst., Troy, N. Y. (13). 1874.
Neale, Arthur T., Ph. D., New Brunswick, N. J. (29). 1882.
Nelson, Prof. A. B., Centre College, Danville, Ky. (30). 1882.
Nelson, Prof. Edward T., Delaware, Delaware Co., Ohio (24). 1877.
Newberry, Prof. J. S., Columbia College, New York, N. Y. (5). 1875.
Newcomb, Prof. S., Navy Dep't, Washington, D. C. (13). 1874.
Newton, Hubert A., New Haven, Conn. (6). 1874.
Nichols, E. L., Ph. D., Univ. of Kansas, Lawrence, Kansas (28). 1881.
Nichols, Prof. W. R., Mass. Inst. Technology, Boston, Mass. (18). 1875.
Niles, Prof. W. H., Cambridge, Mass. (16). 1874.
Nipher, Prof. F. E., Washington University, St. Louis, Mo. (24). 1876.
Norton, Prof. W. A., New Haven, Conn. (6). 1875.
Norwood, Charles J., Ass't Kentucky Geological Survey, Russellville, Ky. (26). 1881.
- Oliver, Prof. James E., Cornell University, Ithaca, N. Y. (7). 1875.
Oliver, Miss Mary E., Cascadilla Hotel, Ithaca, N. Y. (20). 1874.
Ordway, Prof. John M., Mass. Inst. Technology, Boston, Mass. (9). 1875.
- Orton, Prof. Edward, President Ohio Agricultural and Mechanical College, Columbus, Ohio (19). 1875.
- Osborn, Henry F., S. D., Garrisons, N. Y. (29). 1883.
Osborne, J. W., 212 Delaware Ave. N. E., Washington, D. C. (22). 1874.
Osler, Prof. William, McGill College, Montreal, Canada (28). 1881.
Owen, Dr. Richard, New Harmony, Ind. (20). 1874.
- Packard, Dr. A. S., 115 Angell St., Providence, R. I. (16). 1875.
Paine, Cyrus F., 242 East Ave., Rochester, N. Y. (12). 1874.
Paine, Nathaniel, Worcester, Mass. (18). 1874.
Palfray, Hon. Charles W., Salem, Mass. (21). 1874.
Parke, John G., Lt. Col. Corps of Eng'rs, Bv't Maj. Gen. U. S. A., Office of Chief of Engineers, Washington, D. C. (29). 1881.
Parkhurst, H. M., Law Stenographer, 25 Chambers St., New York, N. Y. (23). 1874.
Payne, Prof. Wm. W., Carleton College, Northfield, Minn. (30). 1883.
Peckham, S. F., Providence, R. I. (18). 1875.
Pedrick, Wm. R., Lawrence, Mass. (22). 1875.

- Peet, Rev. Stephen D., Clinton, Wis. (24). 1881.
- Peirce, Prof. James M., Cambridge, Mass. (28). 1881.
- Penhallow, Prof. D. P., McGill College, Montreal, Can. (30). 1882.
- Perkins, Prof. George H., Burlington, Vt. (17). 1882.
- Perkins, Maurice, Schenectady, N. Y. (15). 1875.
- Peter, Dr. Robert, Ky. Geol. Survey, Lexington, Ky. (29). 1881.
- Pettee, Prof. William H., Ann Arbor, Mich. (24). 1875.
- Phillips, A. W., New Haven, Conn. (24). 1879.
- Phippen, Geo. D., Salem, Mass. (18). 1874.
- Pickering, Prof. E. C., Director of Observ., Cambridge, Mass. (18). 1875.
- Pickering, William H., 84 Mount Vernon St., Boston, Mass. (29). 1883.
- Pike, Dr. William H., University College, Toronto, Can. (29). 1881.
- Pilling, James C., Box 585, Washington, D. C. (28). 1882.
- Platt, Franklin, Ass't Geologist, 2nd Geol. Survey of Pa., 615 Walnut St., Philadelphia. Pa. (27). 1882.
- Potter, Prof. William B., Washington University, St. Louis, Mo. (25). 1879. [1875.]
- Powell, Major J. W., U. S. Geologist, 910 M St., Washington, D. C. (23).
- Prentiss, D. Webster, M. D., Washington, D. C. (29). 1882.
- Prescott, Prof. Albert B., Ann Arbor, Mich. (23). 1875.
- Pritchett, Henry S., Observatory, Washington Univ., St. Louis, Mo. (29). 1881.
- Procter, John R., Director Ky. Geol. Survey, Frankfort, Ky. (26). 1881.
- Pulsifer, Wm. H., St. Louis, Mo. (26). 1879.
- Pumpelly, Prof. Raphael, U. S. Geol. Survey, Newport, R. I. (17). 1875.
- Putnam, F. W., Curator Peabody Museum Archaeology and Ethnology, Cambridge, Mass. Address as Permanent Secretary A. A. A. S., Salem, Mass. (10). 1874.
- Putnam, James J., M. D., 63 Marlborough St., Boston, Mass. (28). 1880.
- Pyncheon, Rev. T. R., Pres't Trinity Coll., Hartford, Conn. (23). 1875.
- Quimby, Prof. E. T., Hanover, N. H. (22). 1874.
- Quincy, Edmund, 88 Clinton St., Boston, Mass. (11). 1874.
- Rauch, Dr. John H., Chicago, Ill. (11). 1875.
- Raymond, Rossiter W., 17 Burling Slip, New York, N. Y. (15). 1875.
- Redfield, J. H., care A. Whitney & Sons, Philadelphia, Pa. (1). 1874.
- Reed, E. Baynes, London, Ontario, Can. (27). 1882.
- Rees, Prof. John K., Columbia College, New York, N. Y. (26). 1878.
- Remsen, Prof. Ira, Johns Hopkins University, Baltimore, Md. (22). 1875.
- Rice, John M., U. S. Naval Academy, Annapolis, Md. (25). 1881.
- Rice, Prof. Wm. North, Middletown, Conn. (18). 1874.
- Richards, Prof. Robert H., Mass. Inst. Tech., Boston, Mass. (22). 1875.
- Richards, Mrs. Robert H., Mass. Inst. of Tech., Boston, Mass. (23). 1878.
- Ricketts, Pierre de Peyster, Ph. D., 10 Cedar St., New York, N. Y. (26). 1880.

- RILEY, PROF. C. V., U. S. Entomologist, 1700 13th St. N. W., Washington, D. C. (17). 1874.
- Ritchie, E. S., 150 Tremont St., Boston, Mass. (10). 1877.
- Robinson, Prof. S. W., Univ. of Ohio, Columbus, Ohio (30). 1883.
- Rockwell, Gen. Alfred P., Office Great Falls Manufacturing Co., Boston, Mass. (10). 1882.
- Rockwell, Chas. H., Box 293, Tarrytown, N. Y. (28). 1883.
- Rockwood, Prof. Charles G., jr., Princeton, N. J. (20). 1874.
- Rogers, Fairman, 202 West Rittenhouse Square, Philadelphia, Pa. (11). 1874.
- Rogers, Prof. Rob't E., Jefferson Med. Coll., Philadelphia, Pa. (18). 1874.
- Rogers, W. A., Ass't Prof. Harvard College Observ., Cambridge, Mass. (15). 1875.
- Rominger, Dr. Carl, Ann Arbor, Mich. (21). 1879.
- Rood, Prof. O. N., Cor. E. 49th St. & Madison Ave., New York, N. Y. (14). 1875.
- Roosevelt, Clinton, 11 Wall St., New York, N. Y. (11). 1874.
- Rosenspitz, Dr. Alexander, Rabbi, Lock Box 430, Portland, Oregon (26). 1883.
- Ross, Waldo O., 189 Devonshire St., Boston, Mass. (29). 1882.
- Rowland, Prof. Henry A., Baltimore, Md. (29). 1880.
- Runkle, Prof. J. D., Mass. Inst. of Tech., Boston, Mass. (2). 1875.
- Russell, I. C., U. S. Geological Survey, Washington, D. C. (25). 1882.
- Rutherford, Lewis M., 175 Second Ave., New York, N. Y. (13). 1875.
- Sadtler, Prof. S. P., Univ. of Pa., Philadelphia, Pa. (22). 1875.
- Safford, Dr. James M., Nashville, Tenn. (6). 1875.
- Sampson, Com'd W. T., U.S.N., Naval Observatory, Washington, D. C. (25). 1881.
- Sanders, William, London, Ontario, Canada (17). 1874.
- Schanck, Prof. J. Stillwell, Princeton, New Jersey (4). 1882.
- Schott, Charles A., U. S. Coast and Geodetic Survey Office, Washington, D. C. (8). 1874.
- Schweitzer, Prof. Paul, State Univ. of Mo., Columbia, Mo. (24). 1877.
- SCUDDER, SAMUEL H., Cambridge, Mass. (13). 1874.
- Seaman, W. H., Microscopist, 1424 11th St. N. W., Washington, D. C. (23). 1874.
- Seiler, Carl, M. D., Philadelphia, Pa. (29). 1882.
- Sestini, Rev. B., Woodstock, Md. (29). 1882.
- Sheafer, P. W., Pottsville, Pa. (4). 1879.
- Sias, Solomon, M. D., Schoharie, Schoharie Co., N. Y. (10). 1874.
- Sigsbee, Chas. D., Comd'r U. S. N., Navy Dep't, Washington, D. C. (28). 1882.
- Sill, Hon. Elisha N., Cuyahoga Falls, Ohio (6). 1874.
- Silliman, Prof. Benj., Yale College, New Haven, Conn. (1). 1874.
- Silliman, Prof. Justus M., Lafayette College, Easton, Pa. (19). 1874.
- Skinner, Joseph J., 131 Devonshire St., Boston, Mass. (23). 1880.

- Smiley, Charles W., Smithsonian Institution, Washington, D. C. (28). 1883.
- Smith, Prof. E. A., University of Alabama, Tuscaloosa, Ala. (20). 1877.
- Smith, Edwin, Ass't U. S. Coast and Geodetic Survey, Washington, D. C. (30). 1882.
- Smith, Mrs. Erminnie A., 203 Pacific Ave., Jersey City, N. J. (25). 1880.
- Smith, Prof. F. H., University of Virginia, Charlottesville, Va. (26). 1880.
- SMITH, QUINTIUS C., M. D., No. 704 Congress Ave., Austin, Texas (26). 1881.
- Smith, Prof. S. I., Yale College, New Haven, Conn. (18). 1875.
- Smock, Prof. John Conover, Box 282, New Brunswick, N. J. (23). 1879.
- Snow, Prof. F. H., Lawrence, Kan. (29). 1881.
- Snyder, Prof. Munroe B., High School Observatory, Philadelphia, Pa. (24). 1882.
- Spencer, Prof. J. William, Univ. of Missouri, Columbia, Mo. (28). 1882.
- Spencer, John W., Geol., Paxton, Sullivan Co., Ind. (20). 1874.
- Springer, Dr. Alfred, Box 573, Cincinnati, Ohio (24). 1880.
- Stallo, J. B., Masonic Temple, Cincinnati, Ohio (30). 1882.
- Stanard, Benjamin A., Cleveland, Ohio (6). 1874.
- Stearns, R. E. C., care Smithsonian Inst., Washington, D. C. (18). 1874.
- Steiner, Dr. Lewis H., Frederick City, Md. (7). 1874.
- STEPHENS, W. HUDSON, Lowville, N. Y. (18). 1874.
- Sternberg, George M., Surgeon U. S. A., Care Surgeon General, U. S. A., Washington, D. C. (24). 1880.
- Stevens, W. LeConte, 170 Joralemon St., Brooklyn, N. Y. (29). 1882.
- Stockwell, John N., 579 Case Avenue, Cleveland, Ohio (18). 1875.
- Stone, Georgé H., Colorado Springs, Col. (29). 1882.
- Stone, Mrs. Leander, 3352 Indiana Avenue, Chicago, Ill. (22). 1874.
- Stone, Ormond, Director Leander McCormick Observatory, Univ. of Va., Va. (24). 1876.
- Storrs, Henry E., Jacksonville, Ill. (20). 1874.
- Story, Wm. E., Johns Hopkins Univ., Baltimore, Md. (29). 1881.
- Stuart, Prof. A. P. S., Lincoln, Nebraska (21). 1874.
- Sturtevant, E. Lewis, M. D., Geneva, N. Y. (29). 1882.
- Sutton, Dr. George, Aurora, Dearborn Co., Ind. (20). 1881.
- Swallow, Prof. G. C., Columbia, Mo. (10). 1875.
- Swift, Lewis, Ph. D., Rochester, N. Y. (29). 1882.
- Tainter, Sumner, 1221 Connecticut Ave., Washington, D. C. (29). 1881.
- Tappan, Prof. Eli T., Kenyon College, Gambier, Ohio (20). 1874.
- Taylor, Wm. B., Smithsonian Institution, Washington, D. C. (29). 1881.
- Terry, Prof. N. M., U. S. Naval Academy, Annapolis, Md. (23). 1874.
- Thomas, Benj. F., Ph. D., Univ. State of Missouri, Columbia, Mo. (29). 1882.
- Thomas, Prof. Cyrus, Carbondale, Ill. (30). 1882.
- Thurston, Prof. R. H., Stevens Institute, Hoboken, N. J. (23). 1875.
- Todd, Prof. David P., Director Lawrence Observatory, Amherst College, Amherst, Mass. (27). 1881.

- Townshend, Prof. N. S., Columbus, Ohio (17). 1881.
Tracy, Sam'l M., Columbia, Boone Co., Mo. (27). 1881.
Trembley, J. B., M. D., Oakland, Alameda Co., Cal. (17). 1880.
Trowbridge, Prof. John, Harvard University, Cambridge, Mass. (25). 1876.
Trowbridge, Prof. W. P., New Haven, Conn. (10). 1874.
True, Fred W., U. S. National Museum, Washington, D. C. (28). 1882.
Trumbull, Dr. J. Hammond, Hartford, Conn. (29). 1882.
Tuttle, Prof. Albert H., Columbus, Ohio (17). 1874.
- Uhler, Philip R., Baltimore, Md. (19). 1874.
Upham, Warren, Nashua, N. H. (25). 1880.
Upton, Winslow, Brown Univ., Providence, R. I. (29). 1883.
- Van der Weyde, P. H., M.D., Box 3619, New York, N. Y. (17). 1874.
Van Dyck, Prof. Francis Cuyler, New Brunswick, N. J. (28). 1882.
Van Vleck, Prof. John M., Middletown, Conn. (23). 1875.
Verrill, Prof. A. E., Yale College, New Haven, Conn. (16). 1875.
Vose, Prof. George L., Mass. Inst. Technology, Boston, Mass. (15). 1875
- Wadsworth, M. Edward, Ph. D., Assistant in Lithology, Museum of Comparative Zoology, Cambridge, Mass. (23). 1874.
Walcott, Charles D., U. S. Geol. Survey, Washington, D. C. (25). 1882.
Waldo, Leonard, S. D., New Haven, Conn. (28). 1880.
Walker, Prof. J. R., Bay Saint Louis, Hancock Co., Miss. (19). 1874.
Walker, Prof. Joseph B. (20). 1874.
Wallace, Wm., Ansonia, Conn. (28). 1882.
WALLER, E., School of Mines, Columbia College, New York, N. Y. (23). 1874.
Walling, H. F., Cambridge, Mass. (16). 1874.
Walmsley, W. H., 1016 Chestnut St., Philadelphia, Pa. (28). 1883.
Ward, Prof. Henry A., Rochester, N. Y. (13). 1875.
Ward, Lester F., U. S. Geological Survey, Washington, D. C. (26). 1879.
Ward, Dr. R. H., 53 Fourth St., Troy, N. Y. (17). 1874.
Warder, Prof. Robert B., Lafayette, Ind. (19). 1881.
WARNER, JAMES D., 199 Baltic St., Brooklyn, N. Y. (18). 1874.
Warren, Cyrus M., Brookline, Mass. (29). 1882.
Warren, Prof. S. Edward, Newton, Mass. (17). 1875.
Watson, Sereno, Botanic Gardens, Cambridge, Mass. (22). 1875.
Wead, Prof. Charles K., Univ. of Mich., Ann Arbor, Mich. (23). 1880.
Webb, Prof. J. Burkitt, Ithaca, N. Y. (31). 1883.
Webster, Prof. H. E., Union College, Schenectady, N. Y. (23). 1882.
Webster, Prof. N. B., Principal Webster Inst., Norfolk, Va. (7). 1874.
Wells, Daniel H., Hartford, Conn. (18). 1875.
Westcott, O. S., Maywood, Cook Co., Ill. (21). 1874.
Wheatland, Dr. Henry, President Essex Inst., Salem, Mass. (1). 1874.
Wheeler, Prof. C. G., Univ. of Chicago, Chicago, Ill. (18). 1883.

- Wheeler, Capt. Geo. M., U. S. E., Lock Box 93, Washington, D. C. (25). 1879.
- Wheeler, Orlando B., Ass't U.S. Lake Survey, Detroit, Mich. (24). 1882.
- Wheildon, W. W., Concord, Mass. (13). 1874.
- White, Prof. C. A., Le Droit Park, Washington, D. C. (17). 1875.
- White, Prof. I. C., Univ. of W. Va., Morgantown, W. Va. (25). 1882.
- Whitfield, R. P., American Museum Natural History, 77th St. & 8th Avenue, New York, N. Y. (18). 1874.
- Whiting, Miss Sarah F., Wellesley College, Wellesley, Mass. (31). 1883.
- Whitman, Charles O., care G. F. Leonard, Newton Highlands, Mass. (27). 1880.
- Whitney, Solon F., Watertown, Mass. (20). 1874.
- Whittlesey, Col. Charles, 1305 Euclid Ave., Cleveland, Ohio (1). 1875.
- Wilber, G. M., Pine Plains, N. Y. (19). 1874.
- Wilbur, A. B., Port Jervis, Orange Co., N. Y. (23). 1874.
- Wilder, Prof. Burt G., Cornell University, Ithaca, N. Y. (22). 1875.
- Wiley, Prof. Harvey W., Dept. of Agric., Washington, D. C. (21). 1874.
- Williams, Charles H., M. D., 15 Arlington St., Boston, Mass. (22). 1874.
- Williams, H. S., Cornell Univ., Ithaca, N. Y. (18). 1882.
- Williams, Prof. Henry W., 15 Arlington St., Boston, Mass. (11). 1874.
- Wilson, Prof. Daniel, President University College, 117 Bloor St., Toronto, Canada (25). 1876.
- Winchell, Prof. Alex., Ann Arbor, Mich. (3). 1875.
- Winchell, Prof. N. H., Univ. of Minnesota, Minneapolis, Minn. (19). 1874.
- Winsor, Justin, Librarian Harvard Univ., Cambridge, Mass. (29). 1882.
- Woerd, Chas. V., Am. Watch Co., Waltham, Mass. (29). 1881.
- Wood, Prof. De Volson, Hoboken, N. J. (29). 1881.
- Wormley, T. G., Univ. of Pennsylvania, Philadelphia, Pa. (20). 1878.
- Worthen, A. H., Springfield, Ill. (5). 1874.
- Wright, Prof. Albert A., Oberlin College, Oberlin, Ohio (24). 1880.
- Wright, Prof. Arthur W., Yale College, New Haven, Conn. (14). 1874.
- Wright, Rev. Geo. F., Oberlin College, Oberlin, Ohio (29). 1882.
- Wurtele, Rev. Louis C., Acton Vale, Province of Quebec, Can. (11). 1875.
- Wyckoff, Wm. C., 44 Howard St., New York (20). 1874.
- Wylie, Prof. Theoph. A., Indiana Univ., Bloomington, Ind. (20). 1874.
- Youmans, Prof. Edward L., New York, N. Y. (6). 1874.
- Young, C. A., Prof. of Astronomy, College of New Jersey, Princeton, New Jersey (18). 1874.
- Zentmayer, Joseph, 147 So. Fourth St., Philadelphia, Pa. (29). 1882.

[566 FELLOWS.]

TOTAL NUMBER OF MEMBERS OF THE ASSOCIATION, 2005.

DECEASED MEMBERS.

[Information respecting omissions in this list, and the date of birth and of decease of any of the former members, is requested by the Permanent Secretary.]

- Abbe, George W., New York, N. Y. (23). Died Sept. 25, 1879.
- Abert, J. J., Washington, D. C. (1). Born in 1785. Died January 27, 1863.
- Adams, C. B., Amherst, Mass. (1). Born January 11, 1814. Died Jan'y 19, 1853.
- Adams, Edwin F., Charlestown, Mass. (18).
- Adams, Samuel, Jacksonville, Ill. (18). Born Dec. 19, 1806. Died April 29, 1877.
- Agassiz, Louis, Cambridge, Mass. (1). Born May 28, 1807. Died Dec. 14, 1873.
- Ainsworth, J. G., Barry, Mass. (14).
- Alexander, Stephen, Princeton, N. J. (1). Born Sept. 1, 1806. Died June 25, 1883.
- Allen, Thomas, St. Louis, Mo. (27). Died April 8, 1882.
- Allen, Zachariah, Providence, R. I. (1). Died March 17, 1882.
- Allston, R. F. W., Georgetown, S. C. (3). Born April 21, 1801. Died April 7, 1864.
- Ames, N. P., Springfield, Mass. (1). Born in 1803. Died April 23, 1847.
- Andrews, Ebenezer B., Lancaster, Ohio (7). Died Aug. 21, 1880, aged 59.
- Anthony, Charles H., Albany, N. Y. (6). Died in 1874.
- Appleton, Nathan, Boston, Mass. (1). Born Oct. 6, 1779. Died July 14, 1861.
- Armstrong, John W., Fredonia, N. Y. (24).
- Atwater, Mrs. S. T., Chicago, Ill. (17). Born Aug. 8, 1812. Died April 11, 1878.
- Aufrecht, Louis, Cincinnati, Ohio (30).
- Bache, Alexander D., Washington, D. C. (1). Born July 19, 1806. Died Feb. 17, 1867.
- Bache, Franklin, Philadelphia, Pa. (1). Born Oct. 25, 1792. Died March 19, 1864.
- Bailey, Jacob W., West Point, N. Y. (1). Born April 29, 1811. Died Feb. 26, 1857.
- Bardwell, F. W., Lawrence, Kan. (13). Died in 1878.
- Barnard, John G., New York, N. Y. (14). Died May 14, 1882.
- Barrett, Moses, Milwaukee, Wis. (21). Died in 1873.
- Barry, Redmond, Melbourne, Australia (25).
- Beck, C. F., Philadelphia, Pa. (1).

- Beck, Lewis C., New Brunswick, N. J. (1). Born Oct. 4, 1798. Died April 21, 1853.
- Beck, T. Romeyn, Albany, N. Y. (1). Born Aug. 11, 1791. Died Nov. 19, 1855.
- Belfrage, G. W., Clifton, Texas (29). Died Dec. 7, 1882.
- Belt, Thomas, London, Eng. (27). Died Sept. 8, 1878.
- Benedict, George W., Burlington, Vt. (16). Born Jan. 11, 1796. Died in 1871.
- Bicknell, Edwin, Boston, Mass. (18). Born in 1830. Died March 19, 1877.
- Binney, Amos, Boston, Mass. (1). Born Oct. 18, 1803. Died Feb. 18, 1847.
- Binney, John, Boston, Mass. (3).
- Blackie, Geo. S., Nashville, Tenn. (26).
- Blake, Homer C., New York, N. Y. (28). Born Feb. 1, 1822.
- Blanding, William, ———, R. I. (1).
- Blatchford, Thomas W., Troy, N. Y. (6).
- Blatchley, Miss S. L., New Haven, Conn. (19).
- Boadle, John, Haddonfield, N. J. (20). Born in 1805. Died in July, 1878.
- Bomford, George, Washington, D. C. (1). Born 1780. Died March 25, 1848.
- Bowron, James, South Pittsburg, Tenn. (26). Died in Dec., 1877.
- Bradley, Leverette, Jersey City, N. J. (15). Died in 1875.
- Braithwaite, Jos., Chambly, C. W. (11).
- Briggs, Albert D., Springfield, Mass. (13). Died Feb. 20, 1881.
- Briggs, Robert, Philadelphia, Pa. (29). Born May 18, 1822. Died July 24, 1882.
- Brigham, Charles H., Ann Arbor, Mich. (17). Born July 27, 1820. Died in Jan., 1879.
- Brown, Andrew, Natchez, Miss. (1).
- Brown, Horace, Salem, Mass. (27). Died in July, 1883.
- Burbank, L. S., Woburn, Mass. (18).
- Burnap, G. W., Baltimore, Md. (12). Born Nov. 30, 1802. Died Sept. 8, 1859.
- Burnett, Waldo I., Boston, Mass. (1). Died July 1, 1854, aged 27.
- Butler, Thomas B., Norwalk, Conn. (10). Born Aug. 22, 1806. Died June 8, 1873.
- Cairns, F. A., New York, N. Y. (27). Died in 1879.
- Campbell, Mrs. Mary H., Crawfordsville, Ind. (22). Died Feb. 27, 1882.
- Carpenter, Thornton, Camden, S. C. (7).
- Carpenter, William M., New Orleans, La. (1).
- Case, Leonard, Cleveland, Ohio (15). Born June 27, 1820. Died Jan. 5, 1880.
- Case, William, Cleveland, Ohio (6).
- Caswell, Alexis, Providence, R. I. (2). Born Jan. 29, 1799. Died Jan. 8, 1877.

- Chadbourne, Paul Ansel, Amherst, Mass. (10). Born Oct. 21, 1823. Died Feb. 23, 1883.
- Chapman, N., Philadelphia, Pa. (1). Born May 28, 1780. Died July 1, 1853.
- Chase, Stephen, Hanover, N. H. (2). Born in 1813. Died Aug. 5, 1851.
- Chauvenet, William, St. Louis, Mo. (1). Born May 24, 1819. Died Dec. 13, 1870.
- Cheney, Miss Margaret S., Jamaica Plain, Mass. (29).
- Clapp, Asahel, New Albany, Ind. (1). Born Oct. 5, 1792. Died Dec. 15, 1862.
- Clark, Henry James, Cambridge, Mass. (13). Died July 1, 1873, aged 47.
- Clark, Joseph, Cincinnati, Ohio (5).
- Clarke, A. B., Holyoke, Mass. (13).
- Cleaveland, C. H., Cincinnati, Ohio (9).
- Cleveland, A. B., Cambridge, Mass. (2).
- Coffin, James H., Easton, Pa. (1). Born Sept. 6, 1806. Died Feb. 6, 1873.
- Cole, Thomas, Salem, Mass. (1). Born Dec. 24, 1779. Died June 24, 1852.
- Coleman, Henry, Boston, Mass. (1).
- Collins, Frederick, Washington, D. C. (28). Born Dec. 5, 1842. Died Oct. 27, 1881.
- Conrad, Timothy Abbott, Philadelphia, Pa. (1). Born in August, 1803. Died August 9, 1877.
- Cooke, Caleb, Salem, Mass. (18). Born Feb. 15, 1838. Died June 5, 1880.
- Cooper, William, Hoboken, N. J. (9). Died in 1864.
- Corning, Erastus, Albany, N. Y. (6). Born Dec. 14, 1794. Died April 9, 1872.
- Couper, James Hamilton, Darien, Ga. (1). Born March 5, 1794. Died July 3, 1866.
- Cramp, J. M., Wolfville, N. S. (11). Born July 25, 1796. Died Dec. 6, 1881.
- Crocker, Charles F., Lawrence, Mass. (22). Died in July, 1881.
- Crosby, Alpheus, Salem, Mass. (10). Born Oct. 13, 1810. Died Apr. 17, 1874.
- Crosby, Thomas R., Hanover, N. H. (18). Born Oct. 22, 1816. Died March 1, 1872.
- Croswell, Edwin, Albany, N. Y. (6). Born in May, 1797. Died June 13, 1871.
- Curry, W. F., Geneva, N. Y. (11). 1871.
- Curtis, Josiah, Washington, D. C. (18). Died Aug. 1, 1883.
- Dalrymple, E. A., Baltimore, Md. (11). Died Oct. 30, 1881.
- Dayton, Edwin A., Madrid, N. Y. (7). Born in 1827. Died June 24, 1873.
- Dean, Amos, Albany, N. Y. (6). Born Jan. 16, 1803. Died Jan. 26, 1868.
- Dearborn, George H. A. S., Roxbury, Mass. (1).
- Dekay, James E., New York, N. Y. (1). Born in 1792. Died Nov. 21, 1851.
- DeLaski, John, Carver's Harbor, Me. (18).

- Dewey, Chester, Rochester, N. Y. (1). Born Oct. 25, 1781. Died Dec. 15, 1867.
- Dexter, G. M., Boston, Mass. (11).
- Dillingham, W. A. P., Augusta, Me. (17).
- Dimmick, L. N., Santa Barbara, Cal. (29). Died May 31, 1884.
- Doggett, Mrs. Kate N., Chicago, Ill. (17). Died March 12, 1884.
- Doggett, Wm. E., Chicago, Ill. (17). Born Nov. 20, 1820. Died in 1876.
- Doolittle, L., Lenoxville, C. E. (11). Died in 1862.
- Dorr, E. P., Buffalo, N. Y. (15). Died March 28, 1881.
- Draper, Henry, New York, N. Y. (28).
- Ducatel, J. T., Baltimore, Md. (1).
- Duffield, George, Detroit, Mich. (10). Born July 4, 1794. Died June 26, 1869.
- Dumont, A. H., Newport, R. I. (14).
- Duncan, Lucius C., New Orleans, La. (10). Died Aug. 9, 1855, aged 54.
- Dunn, R. P., Providence, R. I. (14).
- Easton, Norman, Fall River, Mass. (14). Died Dec. 21, 1872.
- Eaton, James H., Beloit, Wis. (17). Died Jan. 5, 1877.
- Elwyn, Alfred L., Philadelphia, Pa. (1). Died March 15, 1884.
- Ely, Charles Arthur, Elyria, Ohio (4).
- Emerson, Geo. B., Boston, Mass. (1). Born Sept. 12, 1797. Died March 4, 1881.
- Emmons, Ebenezer, Williamstown, Mass. (1). Born May 16, 1799. Died October 1, 1863.
- Engelmann, George, St. Louis, Mo. (1). Born Feb. 2, 1809. Died Feb. 4, 1884.
- Engstrom, A. B., Burlington, N. J. (1).
- Everett, Edward, Boston, Mass. (2). Born April 11, 1794. Died Jan. 15, 1865.
- Ewing, Thomas, Lancaster, Ohio (5). Born Dec. 28, 1789. Died Oct. 26, 1871.
- Faries, R. J., Wauwatosa, Wis. (21). Died May 31, 1878.
- Ferris, Isaac, New York, N. Y. (6). Born Oct. 9, 1798. Died June 16, 1873.
- Feuchtwanger, Lewis, New York, N. Y. (11). Died June 25, 1876.
- Fillmore, Millard, Buffalo, N. Y. (7). Born Jan. 7, 1800. Died March 8, 1874.
- Fisher, Mark, Trenton, N. J. (10).
- Fitch, O. H., Ashtabula, Ohio (7). Died Sept. 17, 1882, in his 80th year.
- Forbush, E. B., Buffalo, N. Y. (15).
- Force, Peter, Washington, D. C. (4). Born Nov. 26, 1790. Died Jan. 23, 1868.
- Ford, A. C., Nashville, Tenn. (26).
- Forshey, Caleb G., New Orleans, La. (21). Died in Aug., 1881.
- Foster, John W., Chicago, Ill. (1). Born March 4, 1815. Died June 29, 1873.

- Foucon, Felix, Madison, Wis. (18).
Fowle, Wm. B., Boston, Mass. (1). Born Oct. 17, 1795. Died Feb. 6, 1865.
Fox, Charles, Grosse Ile, Mich. (7).
Frazer, John F., Philadelphia, Pa. (1). Born July 8, 1812. Died Oct. 12, 1872.
French, J. W., West Point, N. Y. (11).
Garber, A. P., Columbia, Pa. (29). Died Aug. 26, 1881.
Gavit, John E., New York, N. Y. (1).
Gay, Martin, Boston, Mass. (1). Died Jan. 12, 1850, aged 46.
Gibbon, J. H., Charlotte, N. C. (3).
Gillespie, W. M., Schenectady, N. Y. (10). Born in 1816. Died Jan'y 1, 1868.
Gilmor, Robert, Baltimore, Md. (1).
Glazier, W. W., Key West, Fla. (29). Died Dec. 11, 1880.
Goldmark, J., New York, N. Y. (29). Died in April, 1882.
Gould, Augustus A., Boston, Mass. (11). Born April 23, 1805. Died Sept. 15, 1866.
Gould, B. A., Boston, Mass. (2). Born June 15, 1787. Died Oct. 24, 1859.
Graham, James D., Washington, D. C. (1). Born in 1799. Died Dec. 28, 1865.
Gray, Alonzo, Brooklyn, N. Y. (13). Born in 1808. Died March 10, 1860.
Gray, James H., Springfield, Mass. (6).
Greene, Benjamin D., Boston, Mass. (1). Died Oct. 14, 1862, aged 68.
Greene, Everett W., Madison, N. J. (10). Died in 1864.
Greene, Samuel, Woonsocket, R. I. (9). Died in 1868.
Greer, James, Dayton, Ohio (20). Died in Feb., 1874.
Griffith, Robert E., Philadelphia, Pa. (1).
Griswold, John A., Troy, N. Y. (19). Born in 1822. Died Oct. 31, 1872.
Guest, William E., Ogdensburg, N. Y. (6).
Guyot, Arnold, Princeton, N. J. (1). Born Sept. 5, 1809. Died Feb. 8, 1884.
- Hackley, Charles W., New York, N. Y. (4). Born March 9, 1809. Died January 10, 1861.
Hadley, George, Buffalo, N. Y. (6). Born June, 1813. Died Oct. 16, 1877.
Haldeman, S. S., Chickies, Pa. (1). Died Sept. 10, 1880, aged 68.
Hale, Enoch, Boston, Mass. (1). Born Jan. 29, 1790. Died Nov. 12, 1848.
Hance, Ebenezer, Fallsington P. O., Pa. (7). Died in 1876.
Hare, Robert, Philadelphia, Pa. (1). Born Jan. 17, 1781. Died May 15, 1858.
Harlan, Joseph G., Haverford, Pa. (8).
Harlan, Richard, Philadelphia, Pa. (1).
Harris, Thaddeus W., Cambridge, Mass. (1). Born Nov. 12, 1795. Died Jan. 16, 1856.
Harrison, A. M., Plymouth, Mass. (29).

- Harrison, Jos., jr., Philadelphia, Pa. (12).
Hart, Simeon, Farmington, Conn. (1). Died April 20, 1853, aged 57.
Hartt, Charles F., Ithaca, N. Y. (18). Born in 1840. Died March 18, 1878.
Haven, Joseph, Chicago, Ill. (17). Born Jan. 4, 1816. Died May 23, 1874.
Hawes, George W., Washington, D. C. (23). Born Dec. 31, 1848. Died June 22, 1882.
Hayden, H. H., Baltimore, Md. (1).
Hayes, George E., Buffalo, N. Y. (15).
Hayward, James, Boston, Mass. (1). Died July 27, 1866, aged 80.
Hempstead, G. S. B., Portsmouth, Ohio (29). Died July 9, 1883, in his 89th year.
Henry, Jos., Washington, D. C. (1). Born Dec. 17, 1797. Died May 13, 1878.
Hickox, S. V. R., Chicago, Ill. (17). Died in 1872.
Hilgard, Theo. C., St. Louis, Mo. (17). Born Feb. 28, 1828. Died Mch. 5, 1875.
Hill, Walter N., Chester, Pa. (29). Born April 15, 1846. Died March 29, 1884.
Hincks, William, Toronto, C. W. (11).
Hitchcock, Edward, Amherst, Mass. (1). Born May 24, 1793. Died Feb. 27, 1864.
Hodgson, W. B., Savannah, Ga. (10). Born 1815.
Holbrook, John E., Charleston, S. C. (1). Born Dec. 31, 1796. Died Sept. 8, 1871.
Hopkins, Albert, Williamstown, Mass. (19). Born July 14, 1807. Died May 25, 1872.
Hopkins, James G., Ogdensburg, N. Y. (10). Died in 1860.
Hopkins, T. O., Williamsville, N. Y. (10). Died in 1866.
Hopkins, Wm., Lima, N. Y. (5). Died in March, 1867.
Horton, C. V. R., Chaumont, N. Y. (10). Died in 1862.
Horton, William, Craigville, N. Y. (1).
Hosford, Benj. F., Haverhill, Mass. (13). Died in 1864.
Houghton, Douglas, Detroit, Mich. (1). Born Sept. 21, 1809. Died Oct. 13, 1845.
Hovey, Edmund O., Crawfordsville, Ind. (20). Born July 15, 1801. Died March 10, 1877.
Howland, Theodore, Buffalo, N. Y. (15).
Hubbert, James, Richmond, Province of Quebec (16). Died in 1868.
Hunt, Edward B., Washington, D. C. (2). Born June 15, 1822. Died Oct. 2, 1863.
Hunt, Freeman, New York, N. Y. (11). Born March 21, 1804. Died March 2, 1858.

Ives, Moses B., Providence, R. I. (9). Died in 1857.
Ives, Thomas P., Providence, R. I. (10).

- Jackson, Charles T., Boston, Mass. (1). Born June 21, 1805. Died Aug. 29, 1880.
- James, Thomas Potts, Cambridge, Mass. (22). Born Sept. 1, 1803. Died Feb. 22, 1882.
- Johnson, Walter R., Washington, D. C. (1). Born June 21, 1794. Died April 26, 1852.
- Johnson, William Schuyler, Washington, D. C. (31). Born Sept. 20, 1859. Died Oct. 6, 1883.
- Jones, Catesby A. R., Washington, D. C. (8).
- Jones, Henry A., Portland, Me. (29). Died Sept. 3, 1883.
- Jones, James H., Boston, Mass. (28).
- Kedzie, W. K., Oberlin, Ohio (25).
- Keely, George W., Waterville, Me. (1). Died in 1878.
- Keep, N. C., Boston, Mass. (13). Died in March, 1875.
- Kennicott, Robert, West Northfield, Ill. (12). Born Nov. 13, 1835. Died in 1866.
- King, Mitchell, Charleston, S. C. (3). Born June 8, 1783. Died in 1862.
- Kite, Thomas, Cincinnati, Ohio (5). Died Feb. 6, 1884.
- Klippart, John H., Columbus, Ohio (17). Died October, 1878.
- Knickerbocker, Charles, Chicago, Ill. (17). Died in 1873.
- Knight, J. B., Philadelphia, Pa. (21). Died March 10, 1879.
- Lacklan, R., Cincinnati, Ohio (11).
- Lapham, Increase A., Milwaukee, Wis. (3). Born Mch. 7, 1811. Died Sept. 14, 1875.
- LaRoche, R., Philadelphia, Pa. (12).
- Lasel, Edward, Williamstown, Mass. (1). Born Jan. 21, 1809. Died in 1852.
- Lawford, Frederick, Montreal, Canada (11). Died in 1866.
- Le Conte, John L., Philadelphia, Pa. (1). Died Nov. 15, 1883.
- Lederer, Baron von, Washington, D. C. (1).
- Lieber, Oscar M., Columbia, S. C. (8). Born Sept. 8, 1830. Died June 27, 1862.
- Lincklaen, Ledyard, Cazenovia, N. Y. (1).
- Linsley, James H., Stafford, Conn. (1). Born May 5, 1787. Died Dec. 26, 1843.
- Lockwood, Moses B., Providence, R. I. (9). Died in 1872.
- Logan, William E., Montreal, Canada (1). Born April 23, 1798. Died June 22, 1875.
- Loosey, Charles F., New York, N. Y. (12).
- Lothrop, Joshua R., Buffalo, N. Y. (15).
- Lyon, Sidney S., Jeffersonville, Ind. (20). Born Aug. 4, 1808. Died June 24, 1872.

- Maaack, G. A., Cambridge, Mass. (18).
Mahan, Dennis H., West Point, N. Y. (9). Born April 2, 1802. Died Sept. 16, 1871.
Marsh, Dexter, Greenfield, Mass. (1).
Marsh, James E., Roxbury, Mass. (10).
Martin, B. N., New York, N. Y. (23). Died Dec. 26, 1883.
Mather, William W., Columbus, Ohio (1). Born May 24, 1804. Died Feb. 27, 1859.
Maude, John B., St. Louis, Mo. (27). Died in April, 1879.
Maupin, S., Charlottesville, Va. (10).
M'Conihe, Isaac, Troy, N. Y. (5).
McFadden, Thomas, Westerville, Ohio (30). Born Nov. 9, 1825. Died Nov. 9, 1883.
McMahon, Mathew, Albany, N. Y. (11).
Meade, George G., Philadelphia, Pa. (15). Born Dec. 30, 1815. Died Nov. 6, 1872.
Meek, F. B., Washington, D. C. (6). Born December 10, 1817. Died December 21, 1876.
Meigs, James Aitken, Philadelphia, Pa. (12). Born July 30, 1829. Died Nov. 9, 1879.
Minifie, William, Baltimore, Md. (12). Born in 1805. Died Oct. 24, 1880.
Mitchel, O. M., Cincinnati, Ohio (3). Born Aug. 28, 1810. Died Oct. 30, 1862.
Mitchell, William, Poughkeepsie, N. Y. (2). Died April 2, 1869, aged 76.
Mitchell, Wm. H., Florence, Ala. (17).
Morgan, Lewis H., Rochester, N. Y. (10). Born Nov. 21, 1818. Died Dec. 17, 1881.
Morris, John B., Nashville, Tenn. (26).
Morton, Samuel G., Philadelphia, Pa. (1). Born Jan. 26, 1799. Died May 15, 1851.
Mudge, Benjamin F., Manhattan, Kansas (25). Born Aug. 11, 1817. Died Nov. 21, 1879, aged 62.
Monroe, Nathan, Bradford, Mass. (6). Born May 16, 1804. Died July 8, 1866.
Monroe, William, Concord, Mass. (18). Died April 27, 1877.
Mussey, William H., Cincinnati, Ohio (30). Born Sept. 13, 1818. Died Aug. 1, 1882.

Newland, John, Saratoga Springs, N. Y. (28). Died Jan. 18, 1880.
Newton, E. H., Cambridge, N. Y. (1).
Nichols, Charles A., Providence, R. I. (17). Born Jan. 4, 1826. Died Oct. 20, 1877.
Nicholson, Thomas, New Orleans, La. (21).
Nicollett, Jean N., Washington, D. C. (1). Born July 24, 1786. Died Sept. 11, 1843.

Norton, J. P., New Haven, Conn. (1). Born in July, 1822. Died Sept. 5, 1852.

Noyes, J. O., New Orleans, La. (21).

Nutt, Cyrus, Bloomington, Ind. (20). Died in 1875.

Oakes, Wm., Ipswich, Mass. (1). Born July 1, 1799. Died July 31, 1848.

Ogden, Robert W., New Orleans, La. (21). Died March 24, 1878.

Ogden, William B., High Bridge, Westchester Co., N. Y. (17). Born in 1805. Died Aug. 3, 1877.

Olmsted, Alexander F., New Haven, Conn. (4). Born Dec. 20, 1822. Died May 5, 1853.

Olmsted, Denison, New Haven, Conn. (1). Born June 18, 1791. Died May 13, 1859.

Olmsted, Denison, jr., New Haven, Conn. (1). Born Feb. 16, 1824. Died Aug. 15, 1846.

Orton, James, Poughkeepsie, N. Y. (18). Died Sept. 24, 1877.

Otis, George Alexander, Washington, D. C. (10). Born Nov. 12, 1830. Died Feb. 23, 1881.

Packer, Harry E., Mauch Chunk, Pa. (30). Died Feb. 1, 1884.

Painter, Jacob, Lima, Pa. (23). Died in 1876.

Painter, Minshall, Lima, Pa. (7).

Parker, Wilbur F., West Meriden, Conn. (23). Died in 1876.

Parkman, Samuel, Boston, Mass. (1). Died Dec. 15, 1854, aged 38.

Payn, Charles H., Saratoga Springs, N. Y. (28). Born May 16, 1814. Died Dec. 20, 1881.

Peirce, B. O., Beverly, Mass. (18). Died Nov. 12, 1883, aged 71 years.

Peirce, Benjamin, Cambridge, Mass. (1). Born April 4, 1809. Died Oct. 6, 1880.

Perkins, George R., Utica, N. Y. (1). Born May 3, 1812. Died Aug. 22, 1876.

Perkins, Henry C., Newburyport, Mass. (18). Born Nov. 13, 1804. Died Feb. 2, 1873.

Perry, John B., Cambridge, Mass. (16). Died Oct. 3, 1872, aged 52.

Perry, M. C., New York, N. Y. (10).

Phelps, Mrs. Almira Hart Lincoln, Baltimore, Md. (13). Died July 15, 1884, in her 91st year.

Piggot, A. Snowden, Baltimore, Md. (10).

Plumb, Ovid, Salisbury, Conn. (9).

Pope, Charles A., St. Louis, Mo. (12). Born May 15, 1818. Died July 6, 1870.

Porter, John A., New Haven, Conn. (14). Born March 15, 1822. Died Aug. 25, 1866.

DECEASED MEMBERS.

lxxxix

- Potter, Stephen H., Hamilton, Ohio (30). Born Nov. 10, 1812. Died Dec. 9, 1883.
- Pourtales, Louis François de, Cambridge, Mass. (1). Born in 1822. Died July 18, 1880.
- Pruyn, John V. L., Albany, N. Y. (1). Born June 22, 1811. Died Nov. 21, 1877.
- Pugh, Evan, Centre Co., Penn. (14).
- Pulsifer, Sidney, Philadelphia, Pa. (21). Died March 24, 1884.
- Putnam, Mrs. F. W., Cambridge, Mass. (19). Born Dec. 29, 1838. Died March 10, 1879.
- Putnam, J. Duncan, Davenport, Iowa (27). Born Oct. 18, 1855. Died Dec. 10, 1881.
- Read, Ezra, Terre Haute, Ind. (20). Died in 1877.
- Redfield, William C., New York (1). Born March 26, 1789. Died Feb. 12, 1857.
- Resor, Jacob, Cincinnati, Ohio (8). Died in 1871.
- Robb, James, Fredericton, N. B. (4).
- Robinson, Coleman T., Buffalo, N. Y. (15).
- Rockwell, John A., Norwich, Conn. (10). Born August 27, 1803. Died February 10, 1861.
- Rogers, Henry D., Glasgow, Scotland (1). Born 1809. Died May 29, 1866.
- Rogers, James B., Philadelphia, Pa. (1). Born February 22, 1803. Died June 15, 1852.
- Rogers, William Barton, Boston, Mass. (1). Born Dec. 7, 1804. Died May 30, 1882.
- Root, Elihu, Amherst, Mass. (25). Born Sept. 14, 1845.
- Sager, Abram, Ann Arbor, Mich. (6). Born December 22, 1810. Died August 6, 1877.
- Sanders, Benjamin D., Wellsburg, W. Va. (19).
- Schaeffer, Geo. C., Washington, D. C. (1). Died in 1873.
- Schley, William, New York, N. Y. (28). Died in 1882.
- Scott, Joseph, Dunham, C. E. (11). Died in 1865.
- Seaman, Ezra C. (20).
- Senter, Harvey S., Aledo, Ill. (20). Died in 1875.
- Seward, William H., Auburn, N. Y. (1). Born May 16, 1801. Died Oct. 10, 1872.
- Sheppard, William, Drummondville, Province of Quebec, Can. (11). Born in 1783. Died in 1867.
- Sherwin, Thomas, Dedham, Mass. (11). Born March 26, 1799. Died July 23, 1869.
- Silliman, Benjamin, New Haven, Conn. (1). Born August 8, 1779. Died November 22, 1864.
- Skinner, John B., Buffalo, N. Y. (15). Died in 1871.
- Slack, J. H., Philadelphia, Pa. (12).

- Smith, David P., Springfield, Mass. (29). Born Oct. 1, 1830. Died Dec. 26, 1880.
- Smith, J. Lawrence, Louisville, Ky. (1). Born Dec. 16, 1818. Died Oct. 12, 1883.
- Smith, J. V., Cincinnati, Ohio (5).
- Smith, James Y., Providence, R. I. (9). Born September 15, 1809. Died in 1876.
- Smith, Lyndon A., Newark, N. J. (9). Born November 11, 1795. Died December 15, 1865.
- Snell, Ebenezer S., Amherst, Mass. (2). Born October 7, 1801. Died in September, 1877.
- Sparks, Jared, Cambridge, Mass. (2). Born May 10, 1789. Died March 14, 1866.
- Spinzig, Charles, St. Louis, Mo. (27). Died Jan. 22, 1882.
- Stearns, Josiah A., Boston, Mass. (29).
- Stimpson, William, Chicago, Ill. (12). Died May 26, 1872.
- Stone, Samuel, Chicago, Ill. (17). Born Dec. 6, 1798. Died May 4, 1876.
- St. John, Joseph S., Albany, N. Y. (28). Died Nov. 23, 1882.
- Sullivant, W. S., Columbus, Ohio (7). Born Jan. 15, 1803. Died April 30, 1873.
- Swain, James, Fort Dodge, Iowa (21). Born in 1816. Died in 1877.
- Tallmadge, James, New York, N. Y. (1). Born Jan. 20, 1778. Died Oct. 3, 1853.
- Taylor, Arthur F., Cleveland, Ohio (29). Died July 3, 1883.
- Taylor, Richard C., Philadelphia, Pa. (1). Born January 18, 1789. Died November 26, 1851.
- Tenney, Sanborn, Williamstown, Mass. (17). Born in January, 1827. Died July 11, 1877.
- Teschemacher, J. E., Boston, Mass. (1). Died Nov. 9, 1853, aged 63.
- Thompson, A. Remsen, New York, N. Y. (1). Died in Oct., 1879.
- Thompson, Alexander, Aurora, N. Y. (1).
- Thompson, Zadock, Burlington, Vt. (1). Born May 23, 1796. Died Jan. 19, 1856.
- Thurber, Isaac, Providence, R. I. (9).
- Tillman, Samuel D., Jersey City, N. J. (15). Died in 1875.
- Tobin, Thomas W., Louisville, Ky. (30). Died Aug. 4, 1883.
- Tolderoy, James B., Fredericton, N. B. (11).
- Torrey, John, New York, N. Y. (1). Born Aug. 15, 1796. Died March 10, 1873.
- Torrey, Joseph, Burlington, Vt. (2). Born Feb. 2, 1797. Died Nov. 26, 1867.
- Totten, Joseph G., Washington, D. C. (1). Born August 23, 1788. Died April 22, 1864.
- Townsend, Howard, Albany, N. Y. (10). Died in 1867.
- Townsend, John K., Philadelphia, Pa. (1).

- Townsend, Robert, Albany, N. Y. (9). Died in 1866.
- Troost, Gerard, Nashville, Tenn. (1). Born March 15, 1776. Died Aug. 14, 1850.
- Tuomey, Michael, Tuscaloosa, Ala. (1). Born September 29, 1805. Died March 20, 1857.
- Tyler, Edward R., New Haven, Conn. (1). Died Sept. 28, 1848.
- Vancleve, John W., Dayton, Ohio (1).
- Vanuxem, Lardner, Bristol, Pa. (1).
- Vaux, William S., Philadelphia, Pa. (1). Born May 19, 1811. Died May 5, 1882.
- Wadsworth, James S., Genesee, N. Y. (2). Born October 30, 1807. Died May 8, 1864.
- Wagner, Tobias, Philadelphia, Pa. (9).
- Walker, Joseph, Oxford, N. Y. (10).
- Walker, Sears C., Washington, D. C. (1). Born March 28, 1805. Died January 30, 1853.
- Walker, Timothy, Cincinnati, Ohio (4). Born Dec. 1, 1802. Died Jan. 15, 1856.
- Walsh, Benjamin D., Rock Island, Ill. (17).
- Wanzer, Ira, Brookfield, Conn. (18). Born April 17, 1796. Died March 5, 1879.
- Warren, Gouverneur Kemble, Newport, R. I. (12). Died Aug. 8, 1882, in his 64th year.
- Warren, John C., Boston, Mass. (1). Born Aug. 1, 1778. Died May 4, 1856.
- Watertown, Charles, Wakefield, Eng. (1).
- Watkins, Samuel, Nashville, Tenn. (26).
- Watson, J. Craig, Ann Arbor, Mich. (13). Born Jan. 28, 1838. Died Nov. 23, 1880.
- Webster, Horace B., Albany, N. Y. (1). Died Dec. 8, 1843.
- Webster, J. W., Cambridge, Mass. (1). Died Aug. 30, 1850, aged 57.
- Webster, M. H., Albany, N. Y. (1).
- Weed, Monroe, Wyoming, N. Y. (6). Died in 1867.
- Welch, Mrs. G. O., Lynn, Mass. (21). Died in June, 1882.
- Weyman, George W., Pittsburg, Pa. (6). Born April, 1832. Died July 16, 1864.
- Wheatland, Richard H., Salem, Mass. (13). Born July 6, 1830. Died Dec. 21, 1863.
- Wheatley, Charles M., Phoenixville, Pa. (1). Died May 6, 1882.
- Wheeler, Arthur W., Baltimore, Md. (29). Born in March, 1859. Died Jan. 6, 1881.
- White, Samuel S., Philadelphia, Pa. (23). Died Dec. 30, 1879.
- Whiting, Lewis E., Saratoga Springs, N. Y. (28). Born March 7, 1815. Died Aug. 2, 1882.

Whitman, Wm. E., Philadelphia, Pa. (23). Died in 1875.

Whitney, Asa, Philadelphia, Pa. (1). Born Dec. 1, 1791. Died June 4, 1874.

Whittlesey, Charles C., St. Louis, Mo. (11). Died in 1872.

Willard, Emma, Troy, N. Y. (15). Born Feb. 23, 1787. Died April 15, 1870.

Williamson, R. S., San Francisco, Cal. (12).

Wilson, W. C., Carlisle, Pa. (12).

Winlock, Joseph, Cambridge, Mass. (5). Born Feb. 6, 1826. Died June 11, 1875.

Woodbury, Levi, Portsmouth, N. H. (1). Born Dec. 22, 1789. Died Sept. 4, 1851.

Woodman, John S., Hanover, N. H. (11). Born in 1819. Died May 15, 1871.

Wright, John, Troy, N. Y. (1).

Wyman, Jeffries, Cambridge, Mass. (1). Born Aug. 11, 1814. Died Sept. 4, 1874.

Yarnall, M., Washington, D. C. (26). Born in 1817. Died Jan. 27, 1879.

Young, Ira, Hanover, N. H. (1). Died Sept. 14, 1858, aged 57.



PUBLICATIONS

FOR SALE BY THE

American Association for the Advancement of Science.

TRANSACTIONS OF THE ASSOCIATION OF AMERICAN GEOLOGISTS AND NATURALISTS, 1st, 2nd and 3d Meetings, 1840-1842, in one volume. 8vo, cloth, 544 pages, 21 plates, 1843, \$3.00. Half Turkey morocco, \$4.50.

MEMOIRS OF THE AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE. 4to. No. 1, *Fossil Butterflies*. By S. H. Scudder. 100 pages, 3 plates, 1875. Paper covers, \$2.00. Half Turkey morocco, \$3.50.

PRESIDENTIAL ADDRESSES, 8vo, pamphlets. Copies of such as can be supplied are furnished at 25 cents each.

REPORT OF THE COMMITTEE ON ZOOLOGICAL NOMENCLATURE, 8vo. pp. 56. Nashville Meeting, 1877. 25 cents.

PROCEEDINGS OF THE AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE. 8vo, paper. With numerous illustrations.

Vol. I.	Philadelphia Meeting, 1848, pages 156, published 1849.
II.	Cambridge " 1849, " 479, " 1850.
III.	Charleston " 1850, " 239, " 1850.
IV.	New Haven " 1850, " 449, " 1851.
V.	Cincinnati " 1851, " 287, " 1851.
VI.	Albany " 1851, " 480, " 1852.
VII.	Cleveland " 1853, " 312, " 1856.
VIII.	Washington " 1854, " 372, " 1855.
IX.	Providence " 1855, " 357, " 1856.
X.	2nd Albany " 1856, " 547, " 1857.
XI.	Montreal " 1857, " 447, " 1858.
XII.	Baltimore " 1858, " 376, " 1859.
XIII.	Springfield " 1859, " 444, " 1860.
XIV.	Newport " 1860, " 328, " 1861.
XV.	Buffalo " 1866, " 174, " 1867.
XVI.	Burlington " 1867, " 218, " 1868.
XVII.	Chicago " 1868, " 410, " 1869.
XVIII.	Salem " 1869, " 352, " 1870.
XIX.	Troy " 1870, " 427, " 1871.
XX.	Indianapolis " 1871, " 491, " 1872.
XXI.	Dubuque " 1872, " 339, " 1873.
XXII.	Portland " 1873, " 669, " 1874.
XXIII.	Hartford " 1874, " 378, " 1875.
XXIV.	Detroit " 1875, " 541, " 1876.
XXV.	2nd Buffalo " 1876, " 424, " 1877.
XXVI.	Nashville " 1877, " 456, " 1878.
XXVII.	St. Louis " 1878, " 424, " 1879.
XXVIII.	Saratoga " 1879, " 636, " 1880.
XXIX.	Boston " 1880, " 875, " 1881.
XXX.	Cincinnati " 1881, " 504, " 1882.
XXXI.	2nd Montreal " 1882, " 743, " 1883.
XXXII.	Minneapolis " 1883, " 598, " 1884.

Price of the Proceedings \$1.50 a Volume, or to Members ordering ten or more Volumes at one time, \$1.00.

Orders will be received for any of the above volumes of Proceedings, bound in full cloth, at 50 cents extra per volume; or in half Turkey morocco, at \$1.00 extra per volume. Uniform Cloth Covers for the Proceedings, by mail, 30 cents each; or 25 cents by express.

Address:

F. W. PUTNAM, Permanent Secretary,

SALEM, MASS.

06
MA
85

GIFT
DEAN M. E. COOLEY

CONSTITUTION,
LIST OF MEETINGS,
OFFICERS,
COMMITTEES AND MEMBERS
OF
THE AMERICAN ASSOCIATION
FOR THE
ADVANCEMENT OF SCIENCE,
FOR THE THIRTY-FOURTH MEETING,
HELD AT
ANN ARBOR, MICH.

AUGUST, 1885.

SALEM:
PUBLISHED BY THE PERMANENT SECRETARY.
1885.

THE LIBRARY OF THE
FEB 4 1910
UNIVERSITY OF MICHIGAN

CONSTITUTION,
LIST OF MEETINGS,
OFFICERS,
COMMITTEES AND MEMBERS
OF
THE AMERICAN ASSOCIATION
FOR THE
ADVANCEMENT OF SCIENCE,

FOR THE THIRTY-FOURTH MEETING,

HELD AT

ANN ARBOR, MICH.

AUGUST, 1885.

SALEM:
PUBLISHED BY THE PERMANENT SECRETARY.
1885.

THE LIBRARY OF THE

FEB 4 1933

UNIVERSITY OF ILLINOIS

EDITED BY
FREDERICK W. PUTNAM,
Permanent Secretary.

PRINTED AT
THE SALEM PRESS,
SALEM, MASS.

506
AMA
1875

OFFICERS ELECTED
FOR THE
ANN ARBOR MEETING.

AUGUST TWENTY-SIX, 1885.

PRESIDENT.

H. A. NEWTON of New Haven, Ct.

VICE PRESIDENTS.

- A. Mathematics and Astronomy—J. M. VAN VLECK of Middletown, Ct.
B. Physics—(Vacancy)
C. Chemistry—W. R. NICHOLS of Boston, Mass.
D. Mechanical Science—J. BURKITT WEBB of Ithaca, N. Y.
E. Geology and Geography—EDWARD ORTON of Columbus, O.
F. Biology—BURT G. WILDER of Ithaca, N. Y.
G. Histology and Microscopy—S. H. GAGE of Ithaca, N. Y.
H. Anthropology—W. H. DALL of Washington, D. C.
I. Economic Science, and Statistics—EDWARD ATKINSON of Boston, Mass.

PERMANENT SECRETARY.

F. W. PUTNAM, of Cambridge.

GENERAL SECRETARY.

CHARLES SEDGWICK MINOT of Boston, Mass.

ASSISTANT GENERAL SECRETARY.

CHARLES C. ABBOTT of Trenton, N. J.

SECRETARIES OF THE SECTIONS.

- A. Mathematics and Astronomy—E. W. HYDE of Cincinnati, O.
B. Physics—(Vacancy)
C. Chemistry—F. P. DUNNINGTON of University of Virginia, Va.
D. Mechanical Science—C. J. H. WOODBURY of Boston, Mass.
E. Geology and Geography—H. CARVILL LEWIS of Germantown, Pa.
F. Biology—(Vacancy)
G. Histology and Microscopy—W. H. WALMSLEY of Philadelphia, Pa.
H. Anthropology—ERMINNIE A. SMITH of Jersey City, N. J.
I. Economic Science and Statistics—J. W. CHICKERING of Washington, D. C.

TREASURER.

WILLIAM LILLY of Mauch Chunk.

443: 1885-1886
1885-1886
1886-1887
1887-1888
1888-1889
1889-1890
1890-1891
1891-1892
1892-1893
1893-1894
1894-1895
1895-1896
1896-1897
1897-1898
1898-1899
1899-1900
1900-1901
1901-1902
1902-1903
1903-1904
1904-1905
1905-1906
1906-1907
1907-1908
1908-1909
1909-1910
1910-1911
1911-1912
1912-1913
1913-1914
1914-1915
1915-1916
1916-1917
1917-1918
1918-1919
1919-1920
1920-1921
1921-1922
1922-1923
1923-1924
1924-1925
1925-1926
1926-1927
1927-1928
1928-1929
1929-1930
1930-1931
1931-1932
1932-1933
1933-1934
1934-1935
1935-1936
1936-1937
1937-1938
1938-1939
1939-1940
1940-1941
1941-1942
1942-1943
1943-1944
1944-1945
1945-1946
1946-1947
1947-1948
1948-1949
1949-1950
1950-1951
1951-1952
1952-1953
1953-1954
1954-1955
1955-1956
1956-1957
1957-1958
1958-1959
1959-1960
1960-1961
1961-1962
1962-1963
1963-1964
1964-1965
1965-1966
1966-1967
1967-1968
1968-1969
1969-1970
1970-1971
1971-1972
1972-1973
1973-1974
1974-1975
1975-1976
1976-1977
1977-1978
1978-1979
1979-1980
1980-1981
1981-1982
1982-1983
1983-1984
1984-1985
1985-1986
1986-1987
1987-1988
1988-1989
1989-1990
1990-1991
1991-1992
1992-1993
1993-1994
1994-1995
1995-1996
1996-1997
1997-1998
1998-1999
1999-2000
2000-2001
2001-2002
2002-2003
2003-2004
2004-2005
2005-2006
2006-2007
2007-2008
2008-2009
2009-2010
2010-2011
2011-2012
2012-2013
2013-2014
2014-2015
2015-2016
2016-2017
2017-2018
2018-2019
2019-2020
2020-2021
2021-2022
2022-2023
2023-2024
2024-2025
2025-2026
2026-2027
2027-2028
2028-2029
2029-2030
2030-2031
2031-2032
2032-2033
2033-2034
2034-2035
2035-2036
2036-2037
2037-2038
2038-2039
2039-2040
2040-2041
2041-2042
2042-2043
2043-2044
2044-2045
2045-2046
2046-2047
2047-2048
2048-2049
2049-2050
2050-2051
2051-2052
2052-2053
2053-2054
2054-2055
2055-2056
2056-2057
2057-2058
2058-2059
2059-2060
2060-2061
2061-2062
2062-2063
2063-2064
2064-2065
2065-2066
2066-2067
2067-2068
2068-2069
2069-2070
2070-2071
2071-2072
2072-2073
2073-2074
2074-2075
2075-2076
2076-2077
2077-2078
2078-2079
2079-2080
2080-2081
2081-2082
2082-2083
2083-2084
2084-2085
2085-2086
2086-2087
2087-2088
2088-2089
2089-2090
2090-2091
2091-2092
2092-2093
2093-2094
2094-2095
2095-2096
2096-2097
2097-2098
2098-2099
2099-2100
2100-2101
2101-2102
2102-2103
2103-2104
2104-2105
2105-2106
2106-2107
2107-2108
2108-2109
2109-2110
2110-2111
2111-2112
2112-2113
2113-2114
2114-2115
2115-2116
2116-2117
2117-2118
2118-2119
2119-2120
2120-2121
2121-2122
2122-2123
2123-2124
2124-2125
2125-2126
2126-2127
2127-2128
2128-2129
2129-2130
2130-2131
2131-2132
2132-2133
2133-2134
2134-2135
2135-2136
2136-2137
2137-2138
2138-2139
2139-2140
2140-2141
2141-2142
2142-2143
2143-2144
2144-2145
2145-2146
2146-2147
2147-2148
2148-2149
2149-2150
2150-2151
2151-2152
2152-2153
2153-2154
2154-2155
2155-2156
2156-2157
2157-2158
2158-2159
2159-2160
2160-2161
2161-2162
2162-2163
2163-2164
2164-2165
2165-2166
2166-2167
2167-2168
2168-2169
2169-2170
2170-2171
2171-2172
2172-2173
2173-2174
2174-2175
2175-2176
2176-2177
2177-2178
2178-2179
2179-2180
2180-2181
2181-2182
2182-2183
2183-2184
2184-2185
2185-2186
2186-2187
2187-2188
2188-2189
2189-2190
2190-2191
2191-2192
2192-2193
2193-2194
2194-2195
2195-2196
2196-2197
2197-2198
2198-2199
2199-2200
2200-2201
2201-2202
2202-2203
2203-2204
2204-2205
2205-2206
2206-2207
2207-2208
2208-2209
2209-2210
2210-2211
2211-2212
2212-2213
2213-2214
2214-2215
2215-2216
2216-2217
2217-2218
2218-2219
2219-2220
2220-2221
2221-2222
2222-2223
2223-2224
2224-2225
2225-2226
2226-2227
2227-2228
2228-2229
2229-2230
2230-2231
2231-2232
2232-2233
2233-2234
2234-2235
2235-2236
2236-2237
2237-2238
2238-2239
2239-2240
2240-2241
2241-2242
2242-2243
2243-2244
2244-2245
2245-2246
2246-2247
2247-2248
2248-2249
2249-2250
2250-2251
2251-2252
2252-2253
2253-2254
2254-2255
2255-2256
2256-2257
2257-2258
2258-2259
2259-2260
2260-2261
2261-2262
2262-2263
2263-2264
2264-2265
2265-2266
2266-2267
2267-2268
2268-2269
2269-2270
2270-2271
2271-2272
2272-2273
2273-2274
2274-2275
2275-2276
2276-2277
2277-2278
2278-2279
2279-2280
2280-2281
2281-2282
2282-2283
2283-2284
2284-2285
2285-2286
2286-2287
2287-2288
2288-2289
2289-2290
2290-2291
2291-2292
2292-2293
2293-2294
2294-2295
2295-2296
2296-2297
2297-2298
2298-2299
2299-2300
2300-2301
2301-2302
2302-2303
2303-2304
2304-2305
2305-2306
2306-2307
2307-2308
2308-2309
2309-2310
2310-2311
2311-2312
2312-2313
2313-2314
2314-2315
2315-2316
2316-2317
2317-2318
2318-2319
2319-2320
2320-2321
2321-2322
2322-2323
2323-2324
2324-2325
2325-2326
2326-2327
2327-2328
2328-2329
2329-2330
2330-2331
2331-2332
2332-2333
2333-2334
2334-2335
2335-2336
2336-2337
2337-2338
2338-2339
2339-2340
2340-2341
2341-2342
2342-2343
2343-2344
2344-2345
2345-2346
2346-2347
2347-2348
2348-2349
2349-2350
2350-2351
2351-2352
2352-2353
2353-2354
2354-2355
2355-2356
2356-2357
2357-2358
2358-2359
2359-2360
2360-2361
2361-2362
2362-2363
2363-2364
2364-2365
2365-2366
2366-2367
2367-2368
2368-2369
2369-2370
2370-2371
2371-2372
2372-2373
2373-2374
2374-2375
2375-2376
2376-2377
2377-2378
2378-2379
2379-2380
2380-2381
2381-2382
2382-2383
2383-2384
2384-2385
2385-2386
2386-2387
2387-2388
2388-2389
2389-2390
2390-2391
2391-2392
2392-2393
2393-2394
2394-2395
2395-2396
2396-2397
2397-2398
2398-2399
2399-2400
2400-2401
2401-2402
2402-2403
2403-2404
2404-2405
2405-2406
2406-2407
2407-2408
2408-2409
2409-2410
2410-2411
2411-2412
2412-2413
2413-2414
2414-2415
2415-2416
2416-2417
2417-2418
2418-2419
2419-2420
2420-2421
2421-2422
2422-2423
2423-2424
2424-2425
2425-2426
2426-2427
2427-2428
2428-2429
2429-2430
2430-2431
2431-2432
2432-2433
2433-2434
2434-2435
2435-2436
2436-2437
2437-2438
2438-2439
2439-2440
2440-2441
2441-2442
2442-2443
2443-2444
2444-2445
2445-2446
2446-2447
2447-2448
2448-2449
2449-2450
2450-2451
2451-2452
2452-2453
2453-2454
2454-2455
2455-2456
2456-2457
2457-2458
2458-2459
2459-2460
2460-2461
2461-2462
2462-2463
2463-2464
2464-2465
2465-2466
2466-2467
2467-2468
2468-2469
2469-2470
2470-2471
2471-2472
2472-2473
2473-2474
2474-2475
2475-2476
2476-2477
2477-2478
2478-2479
2479-2480
2480-2481
2481-2482
2482-2483
2483-2484
2484-2485
2485-2486
2486-2487
2487-2488
2488-2489
2489-2490
2490-2491
2491-2492
2492-2493
2493-2494
2494-2495
2495-2496
2496-2497
2497-2498
2498-2499
2499-2500
2500-2501
2501-2502
2502-2503
2503-2504
2504-2505
2505-2506
2506-2507
2507-2508
2508-2509
2509-2510
2510-2511
2511-2512
2512-2513
2513-2514
2514-2515
2515-2516
2516-2517
2517-2518
2518-2519
2519-2520
2520-2521
2521-2522
2522-2523
2523-2524
2524-2525
2525-2526
2526-2527
2527-2528
2528-2529
2529-2530
2530-2531
2531-2532
2532-2533
2533-2534
2534-2535
2535-2536
2536-2537
2537-2538
2538-2539
2539-2540
2540-2541
2541-2542
2542-2543
2543-2544
2544-2545
2545-2546
2546-2547
2547-2548
2548-2549
2549-2550
2550-2551
2551-2552
2552-2553
2553-2554
2554-2555
2555-2556
2556-2557
2557-2558
2558-2559
2559-2560
2560-2561
2561-2562
2562-2563
2563-2564
2564-2565
2565-2566
2566-2567
2567-2568
2568-2569
2569-2570
2570-2571
2571-2572
2572-2573
2573-2574
2574-2575
2575-2576
2576-2577
2577-2578
2578-2579
2579-2580
2580-2581
2581-2582
2582-2583
2583-2584
2584-2585
2585-2586
2586-2587
2587-2588
2588-2589
2589-2590
2590-2591
2591-2592
2592-2593
2593-2594
2594-2595
2595-2596
2596-2597
2597-2598
2598-2599
2599-2600
2600-2601
2601-2602
2602-2603
2603-2604
2604-2605
2605-2606
2606-2607
2607-2608
2608-2609
2609-2610
2610-2611
2611-2612
2612-2613
2613-2614
2614-2615
2615-2616
2616-2617
2617-2618
2618-2619
2619-2620
2620-2621
2621-2622
2622-2623
2623-2624
2624-2625
2625-2626
2626-2627
2627-2628
2628-2629
2629-2630
2630-2631
2631-2632
2632-2633
2633-2634
2634-2635
2635-2636
2636-2637
2637-2638
2638-2639
2639-2640
2640-2641
2641-2642
2642-2643
2643-2644
2644-2645
2645-2646
2646-2647
2647-2648
2648-2649
2649-2650
2650-2651
2651-2652
2652-2653
2653-2654
2654-2655
2655-2656
2656-2657
2657-2658
2658-2659
2659-2660
2660-2661
2661-2662
2662-2663
2663-2664
2664-2665
2665-2666
2666-2667
2667-2668
2668-2669
2669-2670
2670-2671
2671-2672
2672-2673
2673-2674
2674-2675
2675-2676
2676-2677
2677-2678
2678-2679
2679-2680
2680-2681
2681-2682
2682-2683
2683-2684
2684-2685
2685-2686
2686-2687
2687-2688
2688-2689
2689-2690
2690-2691
2691-2692
2692-2693
2693-2694
2694-2695
2695-2696
2696-2697
2697-2698
2698-2699
2699-2700
2700-2701
2701-2702
2702-2703
2703-2704
2704-2705
2705-2706
2706-2707
2707-2708
2708-2709
2709-2710
2710-2711
2711-2712
2712-2713
2713-2714
2714-2715
2715-2716
2716-2717
2717-2718
2718-2719
2719-2720
2720-2721
2721-2722
2722-2723
2723-2724
2724-2725
2725-2726
2726-2727
2727-2728
2728-2729
2729-2730
2730-2731
2731-2732
2732-2733
2733-2734
2734-2735
2735-2736
2736-2737
2737-2738
2738-2739
2739-2740
2740-2741
2741-2742
2742-2743
2743-2744
2744-2745
2745-2746
2746-2747
2747-2748
2748-2749
2749-2750
2750-2751
2751-2752
2752-2753
2753-2754
2754-2755
2755-2756
2756-2757
2757-2758
2758-2759
2759-2760
2760-2761
2761-2762
2762-2763
2763-2764
2764-2765
2765-2766
2766-2767
2767-2768
2768-2769
2769-2770
2770-2771
2771-2772
2772-2773
2773-2774
2774-2775
2775-2776
2776-2777
2777-2778
2778-2779
2779-2780
2780-2781
2781-2782
2782-2783
2783-2784
2784-2785
2785-2786
2786-2787
2787-2788
2788-2789
2789-2790
2790-2791
2791-2792
2792-2793
2793-2794
2794-2795
2795-2796
2796-2797
2797-2798
2798-2799
2799-2800
2800-2801
2801-2802
2802-2803
2803-2804
2804-2805
2805-2806
2806-2807
2807-2808
2808-2809
2809-2810
2810-2811
2811-2812
2812-2813
2813-2814
2814-2815
2815-2816
2816-2817
2817-2818
2818-2819
2819-2820
2820-2821
2821-2822
2822-2823
2823-2824
2824-2825
2825-2826
2826-2827
2827-2828
2828-2829
2829-2830
2830-2831
2831-2832
2832-2833
2833-2834
2834-2835
2835-2836
2836-2837
2837-2838
2838-2839
2839-2840
2840-2841
2841-2842
2842-2843
2843-2844
2844-2845
2845-2846
2846-2847
2847-2848
2848-2849
2849-2850
2850-2851
2851-2852
2852-2853
2853-2854
2854-2855
2855-2856
2856-2857
2857-2858
2858-2859
2859-2860
2860-2861
2861-2862
2862-2863
2863-2864
2864-2865
2865-2866
2866-2867
2867-2868
2868-2869
2869-2870
2870-2871
2871-2872
2872-2873
2873-2874
2874-2875
2875-2876
2876-2877
2877-2878
2878-2879
2879-2880
2880-2881
2881-2882
2882-2883
2883-2884
2884-2885
2885-2886
2886-2887
2887-2888
2888-2889
2889-2890
2890-2891
2891-2892
2892-2893
2893-2894
2894-2895
2895-2896
2896-2897
2897-2898
2898-2899
2899-2900
2900-2901
2901-2902
2902-2903
2903-2904
2904-29

MEMBERS OF THE STANDING COMMITTEE

FOR THE

ANN ARBOR MEETING.

Past Presidents.—JAMES D. DANA of New Haven; JAMES HALL of Albany; ISAAC LEA of Philadelphia; F. A. P. BARNARD of New York; J. S. NEWBERRY of New York; B. A. GOULD of Cambridge; T. STERRY HUNT of Montreal; ASA GRAY of Cambridge; JOSEPH LOVERING of Cambridge; J. E. HILGARD of Washington; SIMON NEWCOMB of Washington; O. C. MARSH of New Haven; GEORGE F. BARKER of Philadelphia; GEORGE J. BRUSH of New Haven; J. W. DAWSON of Montreal; C. A. YOUNG of Princeton; J. P. LESLEY of Philadelphia.

Vice Presidents of the Last Meeting.—H. T. EDDY of Cincinnati; JOHN TROWBRIDGE of Cambridge; J. W. LANGLEY of Ann Arbor; R. H. THURSTON of Hoboken; N. H. WINCHELL of Minneapolis; E. D. COPE of Philadelphia; T. G. WORMLEY of Philadelphia; E. S. MORSE of Salem; JOHN EATON of Washington.

Officers of the Present Meeting.—H. A. NEWTON of New Haven; J. M. VAN VLECK of Middletown; W. R. NICHOLS of Boston; J. BURKITT WEBB of Ithaca; EDWARD ORTON of Columbus; BURT G. WILDER of Ithaca; S. H. GAGE of Ithaca; W. H. DALL of Washington; EDWARD ATKINSON of Boston; F. W. PUTNAM of Cambridge; C. S. MINOT of Boston; C. C. ABBOTT of Trenton; E. W. HYDE of Cincinnati; F. P. DUNNINGTON of University of Virginia; C. J. H. WOODBURY of Boston; H. CARVILL LEWIS of Germantown; W. H. WALMSLEY of Philadelphia; ERMINNIE A. SMITH of Jersey City; J. W. CHICKERING of Washington; WILLIAM LILLY of Mauch Chunk.

From the Association at Large.—A member to be elected from each Section.

LOCAL COMMITTEE OF ARRANGEMENTS.

President, Hon. THOMAS M. COOLEY.

Treasurer, CHRISTIAN MACK, ESQ.

Secretary, PROF. JOHN W. LANGLEY.

GENERAL CITIZENS' COMMITTEE.

Mr. E. B. Abel, Prof. C. K. Adams, Mr. A. W. Ames, Pres. J. B. Angell, Hon. J. M. Ashley, Mr. Harry W. Ashley, Mr. Philip Bach, Mr. J. N. Bailey, Mr. Emil Baur, Dr. Newton Baldwin, Mr. J. E. Beal, Prof. W. W. Beman, Mr. H. D. Bennett, Mr. M. H. Brennan, Dr. W. F. Breakey, Mr. H. J. Brown, Mr. Benj. Brown, Mr. J. C. Bullis, Mr. Robt. Campbell, Prof. H. N. Chute, Prof. B. W. Cheever, Judge N. W. Cheever, Mr. Jas. Clements, Mr. S. M. Clarkson, Mr. E. W. Coddington, Mr. Wm. Condon, Hon. T. M. Cooley, Prof. M. E. Cooley, Mr. B. F. Crane, Col. H. S. Dean, Mr. Sedgwick Dean, Dr. W. H. Dorrance, Dr. S. H. Douglas, Mr. Edward Duffy, Dr. E. S. Dunster, Mr. C. Eberbach, Mr. Ottmar Eberbach, Mr. Anton Eisele, Hon. Alpheus Felch, Mr. John W. Ferdon, Prof. H. S. Frieze, Dr. G. E. Frothingham, Mr. E. K. Frueauff, Dr. C. George, Mr. J. J. Goodyear, Prof. C. E. Greene, Mr. L. Gruner, Mr. Israel Hall, Mr. Geo. Haller, Mr. A. W. Hamilton, Judge W. D. Harriman, Prof. M. W. Harrington, Rev. S. Haskell, Mr. H. W. Hayes, Mr. G. A. Hendricks, Mr. J. S. Henderson, Mr. W. R. Henderson, Mr. H. B. Henderson, Prof. A. Hennequin, Dr. W. J. Herdman, Mr. Daniel Hiscock, Mr. Chas. E. Hiscock, Mr. E. H. Hudson, Mr. H. Hutzl, Mr. J. T. Jacobs, Prof. O. C. Johnson, Prof. C. N. Jones, Dr. John Kapp, Mr. Ambrose Kearney, Mr. John Keck, Mr. T. J. Keech, Hon. E. D. Kinne, Mr. Kendall Kittredge, Mr. J. W. Knight, Mr. J. C. Knowlton, Prof. J. W. Langley, Mr. J. F. Lawrence, Mr. Christian Mack, Dr. Donald Maclean, Mr. Chas. K. McGee, Mr. Donald McIntyre, Mr. Geo. C. Mahon, Mr. E. Mann, Mr. C. H. Millen, Prof. Geo. S. Morris, Rev. John Neumann, Mr. Geo. Osius, Judge P. L. Page, Dr. A. B. Palmer, Prof. W. H. Payne, Supt. W. S. Perry, Prof. W. H. Pettee, Mr. E. A. Phillips, Mr. E. B. Pond, Mr. Allen B. Pond, Mr. Geo. H. Pond, Rev. R. B. Pope, Mr. Robt. Popkins, Prof. A. B. Prescott, Mr. M. S. Pulcipher, Hon. C. H. Richmond, Rev. W. H. Ryder, Mr. David Rinsey, Mr. J. J. Robison, Prof. H. W. Rogers, Mr. E. H. Scott, Mr. J. Austin Scott, Capt. J. F. Schuh, Mr. F. Schmid, Mr. J. M. Schaeberle, Mr. Moses Seabolt, Mr. J. Q. A. Sessions, Prof. Henry Sewall, Mr. Adam Seyler, Dr. W. B. Smith, Maj. Harrison Soule, Prof. J. B. Steere, Rev. R. H. Steele, Prof. C. H. Stowell, Mr. Jas. L. Stone, Dr. T. J. Sullivan, Mr. J. E. Sumner, Rev. J. T. Sunderland, Mr. L. D. Taylor, Prof. Calvin Thomas, Mr. W. A. Tolchard, Mr. Edward Treadwell, Dr. V. C. Vaughan, Mr. Jas. H. Wade, Mr. Wm. Wagner, Hon. Rufus Waples, Mr. Earl Ware, Mr. B. F. Watts, Mr. W. W. Watts, Prof. C. K. Wead, Mr. J. M. Wheeler, Mr. W. W. Whedon, Mr. C. H. Worden, Mr. Levi Wines, Mr. W. W. Wines, Prof. Alexander Winchell.

LADIES' RECEPTION COMMITTEE.

Mrs. C. K. Adams, Mrs. J. B. Angell, Mrs. J. M. Ashley, Miss Mary Ashley, Mrs. Philip Bach, Mrs. R. A. Beal, Miss Anna Beakes, Mrs. W. W. Beman, Mrs. W. F. Breakey, Mrs. H. J. Brown, Miss Matilda Brown, Mrs. N. W. Cheever, Miss Mary Clements, Miss Ida Clements, Mrs. S. M. Clarkson, Mrs. E. W. Coddington, Mrs. N. B. Cole, Miss Anna Condon, Mrs. T. M. Cooley, Mrs. M. E. Cooley, Mrs. B. F. Crane, Mrs. H. S. Dean, Mrs. I. N. Demmon, Mrs. P. R. B. dePont, Mrs. M. L. D'Ooge, Mrs. G. A. Douglas, Miss Kate Douglas, Miss Alice Douglas, Miss Sarah Douglas, Miss Lulu Douglas, Mrs. E. S. Dunster, Miss Clara Dunster, Mrs. E. Evans, Mrs. J. W. Ferdon,

Miss Mary Ferdon, Miss Carrie Frieze, Mrs. C. L. Ford, Miss A. Frothingham, Mrs. S. S. Garrigues, Miss Lulu Gott, Miss Clara Gott, Mrs. C. E. Greene, Mrs. I. Hall, Miss C. L. Hall, Mrs. A. W. Hamilton, Mrs. W. D. Harriman, Miss Mattie Harriman, Mrs. M. W. Harrington, Mrs. W. J. Herdman, Miss Susie Hill, Miss Clementine L. Houghton, Mrs. L. C. Hunt, Miss Satia Hyde, Mrs. C. A. Jaycox, Miss Elsie Jones, Mrs. E. D. Kinne, Mrs. G. W. Knight, Miss Addie Knight, Mrs. J. C. Knowlton, Miss Millie Knowlton, Mrs. J. W. Langley, Mrs. Christian Mack, Miss Amanda Mack, Mrs. Donald Maclean, Mrs. C. S. Millen, Mrs. George S. Morris, Mrs. A. B. Palmer, Miss Jennie Pease, Mrs. W. S. Perry, Mrs. W. H. Pettee, Mrs. E. B. Pond, Miss Louise Pond, Mrs. R. B. Pope, Mrs. A. B. Prescott, Mrs. H. Randall, Mrs. E. A. Rathbone, Miss Louise Richards, Mrs. C. H. Richmond, Miss Mary A. Richmond, Mrs. H. Wade Rogers, Mrs. Henry W. Rogers, Miss Julia Rominger, Miss Matilda Sager, Miss Mary Scott, Mrs. Thos. Sewall, Mrs. Harrison Soule, Miss Fanny Steele, Miss Emily R. Stebbins, Mrs. C. H. Stowell, Mrs. J. T. Sunderland, Mrs. Jas. H. Wade, Miss Stella Wagner, Mrs. Wm. Waldron, Mrs. C. K. Wead, Miss Lillian Wells, Mrs. J. M. Wheeler, Miss Clara Wheeler, Mrs. Alex. Winchell, Miss Ida B. Winchell, Mrs. A. B. Wood, Miss Jessie Wood.

EXECUTIVE COMMITTEE.

Chairman.—HON. T. M. COOLEY.

Secretary.—PROF. J. W. LANGLEY.

Pres. J. B. Angell, Mr. Philip Bach, Prof. C. E. Greene, Judge W. D. Harriman, Hon. E. D. Kinne, Mr. E. B. Pond, Prof. A. B. Prescott, Hon. C. H. Richmond, Mr. F. Schmid, Mr. J. M. Wheeler, Prof. Alex. Winchell.

COMMITTEE FROM THE UNIVERSITY SENATE.

Chairman.—PRESIDENT J. B. ANGELL.

Prof. C. E. Greene, Prof. M. W. Harrington, Prof. J. W. Langley, Prof. A. B. Prescott, Prof. Henry Sewall, Prof. C. K. Wead, Prof. Alex. Winchell.

COMMITTEE FROM THE COMMON COUNCIL.

Dr. John Kapp, *Mayor*, Mr. E. H. Hudson, Mr. John F. Lawrence, Mr. Geo. H. Pond, Mr. Earl Ware.

COMMITTEE ON PRINTING.

Chairman.—JUDGE N. W. CHEEVER.

Mr. M. H. Brennan, Prof. W. H. Payne, Prof. W. H. Pettee, Mr. E. B. Pond, Mr. L. D. Taylor, Hon. Rufus Waples.

COMMITTEE ON MAILS, TELEGRAMS, AND EXPRESS.

Chairman.—J. C. KNOWLTON.

Mr. A. W. Ames, Mr. J. J. Goodyear, Mr. T. J. Keech, Mr. Allen B. Pond, Mr. M. S. Pulcipher, Mr. W. W. Watts.

COMMITTEE ON TRANSPORTATION.

Chairman.—MAJ. HARRISON SOULE.

Mr. E. B. Abel, Mr. H. J. Brown, Prof. M. E. Cooley, Mr. Edward Duffy, Mr. H. W. Hayes, Mr. E. A. Phillips.

COMMITTEE ON FINANCE.

Chairman—MR. CHRISTIAN MACK.

Dr. Newton Baldwin, Mr. Emil Baur, Mr. J. E. Beal, Prof. W. W. Beman, Mr. Benj. Brown, Mr. Robt. Campbell, Prof. B. W. Cheever, Prof. H. N. Chute, Mr. S. M. Clarkson, Col. H. S. Dean, Dr. W. H. Dorrance, Mr. O. Eberbach, Mr. A. W. Hamilton, Mr. Geo. Haller, Mr. W. R. Henderson, Mr. Chas. E. Hiscock, Mr. J. T. Jacobs, Prof. C. N. Jones, Mr. Ambrose Kearney, Mr. K. Kittredge, Mr. J. J. Robinson, Mr. E. H. Scott, Mr. Moses Seabolt, Mr. J. E. Sumner, Dr. T. J. Sullivan, Mr. W. A. Tolchard, Mr. E. Treadwell, Dr. V. C. Vaughan, Prof. C. K. Wead, Mr. C. H. Worden.

COMMITTEE ON EXCURSIONS.

Chairman—PROF. ALEXANDER WINCHELL.

Mr. Harry W. Ashley, Mr. Jas. Clements, Dr. D. Maclean, Hon. C. H. Richmond, Maj. H. Soule.

COMMITTEE ON INVITATIONS AND RECEPTIONS.

Chairman—PRESIDENT J. B. ANGELL.

Prof. C. K. Adams, Dr. W. F. Breakey, Mr. Jas. Clements, Mr. Sedgwick Dean, Prof. H. S. Frieze, Judge W. D. Harriman, Mr. Israel Hall, Rev. S. Haskell, Dr. W. J. Herdman, Dr. John Kapp, Mr. J. W. Knight, Hon. E. D. Kinne, Mr. J. C. Knowlton, Mr. J. F. Lawrence, Mr. Donald McIntire, Mr. C. H. Millen, Prof. Geo. S. Morris, Dr. A. B. Palmer, Rev. R. B. Pope, Hon. C. H. Richmond, Prof. H. W. Rogers, Hon. Rufus Waples, Mr. J. M. Wheeler, Prof. Alex. Winchell.

COMMITTEE ON ROOMS AND PLACES OF MEETING.

Chairman—MR. JAS. H. WADE.

Prof. M. E. Cooley, Dr. S. H. Douglas, Prof. O. C. Johnson, Supt. W. S. Perry, Prof. H. Sewall.

COMMITTEE ON HOTELS AND LODGINGS.

Chairman—MR. H. D. BENNETT.

Mr. E. B. Abel, Mr. H. J. Brown, Judge W. D. Harriman, Mr. J. Q. A. Sessions.

SPECIAL COMMITTEES OF THE ASSOCIATION.

1. *Permanent Committee on Weights, Measures and Coinage.*

F. A. P. BARNARD of New York,
B. A. GOULD of Cambridge,
J. E. HILGARD of Washington,

H. A. NEWTON of New Haven,
E. B. ELLIOTT of Washington,
JOHN TROWBRIDGE of Cambridge,

A. M. MAYER of Hoboken.

2. *Committee on Membership.*

THE MEMBERS OF THE STANDING COMMITTEE.

3. *Committee on the best methods of Science-Teaching in the Public Schools.*

JOHN EATON of Washington,
R. H. THURSTON of Hoboken,
JAMES MAC ALISTER of Philadelphia,

J. BURKITT WEBB of Ithaca,
C. M. WOODWARD of St. Louis,
C. E. BESSEY of Ames.

This committee has power to add to its number.

4. *Committee on the Registration of Deaths, Births, and Marriages.*

E. B. ELLIOTT of Washington,
J. B. KILLEBREW of Nashville,

E. T. COX of San Francisco,
JOHN COLLETT of Indianapolis.

5. *Committee on Stellar Magnitudes.*

E. C. PICKERING of Cambridge,
LEWIS BOSS of Albany,
S. W. BURNHAM of Chicago,
ASAPH HALL of Washington,
WILLIAM HARKNESS of Washington,

E. S. HOLDEN of Madison,
SIMON NEWCOMB of Washington,
C. H. F. PETERS of Clinton,
ORMOND STONE of Univ. of Va.,
C. A. YOUNG of Princeton.

6. *Committee to confer with Committees of Foreign Associations for the Advancement of Science with reference to an International Convention of Scientific Associations.*

SIMON NEWCOMB of Washington,
T. STERRY HUNT of Montreal,
G. F. BARKER of Philadelphia,

J. W. POWELL of Washington,
E. C. PICKERING of Cambridge,
IRA REMSEN of Baltimore,

C. S. MINOT of Boston.

7. *Committee on Indexing the Literature of the Chemical Elements.*

H. CARRINGTON BOLTON of Hartford,
IRA REMSEN of Baltimore,

F. W. CLARK of Washington,
A. R. LEEDS of Hoboken,

A. A. JULIEN of New York.

8. *Committee on International Congress of Geologists.*

JAMES HALL of Albany,
J. W. DAWSON of Montreal,
J. S. NEWBERRY of New York,
T. STERRY HUNT of Montreal,
C. H. HITCHCOCK of Hanover,
RAPHAEL PUMPELLY of Newport,

J. P. LESLEY of Philadelphia,
J. W. POWELL of Washington,
G. A. COOK of New Brunswick,
JOHN STEVENSON of New York,
E. D. COPE of Philadelphia,
E. A. SMITH of Tuscaloosa.

9. *Committee to confer with the United States Geologist in regard to coöperation between the Government and State Geological Surveys.*

JAMES HALL of Albany,
T. STERRY HUNT of Montreal,
J. S. NEWBERRY of New York,
N. H. WINCHELL of Minneapolis,

C. H. HITCHCOCK of Hanover,
J. P. LESLEY of Philadelphia,
G. H. COOK of Brunswick,
E. A. SMITH of Tuscaloosa,

JOSEPH LE CONTE of San Francisco.

This Committee has power to add to its number:

10. *Committee on Interchange of Courtesies between the American and British Associations for the Advancement of Science.*

C. A. YOUNG of Princeton,
J. P. LESLEY of Philadelphia,
J. W. DAWSON of Montreal,

T. STERRY HUNT of Montreal,
E. S. MORSE of Salem,
T. C. MENDENHALL of Washington.

F. W. PUTNAM of Cambridge.

11. *Committee in relation to Duty on Scientific Books.*

H. A. ROWLAND of Baltimore,
C. A. YOUNG of Princeton,

J. W. POWELL of Washington,
J. D. COX of Cincinnati,

E. S. MORSE of Salem.

12. *Committee on Uniformity of Graphic Illustrations in representing facts in Statistics, etc.*

E. B. ELLIOTT of Washington,
J. E. HILGARD of Washington,

CHARLES WARREN of Washington,
WILLIAM KENT of Pittsburgh.

13. *Committee on the Investigation of Fermentation and its Effects.*

ALFRED SPRINGER of Cincinnati,
F. W. CLARKE of Washington,

G. M. STERNBERG of Washington,
H. W. WILEY of Washington,

CLIFFORD RICHARDSON of Washington.

14. *Committee on Anatomical Nomenclature, with Special reference to the Brain.*

JOSEPH LEIDY of Philadelphia,
HARRISON ALLEN of Philadelphia,

H. OSBORN of Princeton,
T. B. STOWELL of Cortland,

B. G. WILDER of Ithaca.

15. *Committee on the Encouragement of Researches upon the Health and Disease of Plants.*

J. C. ARTHUR of Charles City,
W. J. BEAL of Agricultural College, Mich.
C. E. BESSEY of Ames,

T. J. BURRILL of Champaign,
W. G. FARLOW of Cambridge,
C. H. PECK of Albany,

J. T. ROTHROCK of West Chester.

16. *Committee on Physics Teaching.*

T. C. MENDENHALL of Washington,
W. A. ANTHONY of Ithaca,

H. S. CARHART of Evanston.
F. H. SMITH of Charlottesville,

JOHN TROWBRIDGE of Cambridge.

17. *Committee to present to the Postmaster General the importance of a change in the postal laws in relation to the transportation of Botanical specimens through the mails.*

L. F. WARD of Washington,

GEORGE VASEY of Washington,

J. W. CHICKERING, JR., of Washington.

18. *Auditors.*

HENRY WHEATLAND of Salem,

THOMAS MEEHAN of Germantown.

MEETINGS AND OFFICERS OF THE AMERICAN ASSOCIATION OF GEOLOGISTS AND NATURALISTS.

MEETING.	DATE.	PLACE.	CHAIRMAN.	SECRETARY.	ASSIST' SEC'Y.	TREASURER.
1st	April 2, 1840,	Philadelphia,	Edward Hitchcock,*	L. C. Beck,*	{ B. Silliman, jr.,* C. B. Frego, J. D. Whitney, M. B. Williams,	John Locke.*
2d	April 5, 1841,	Philadelphia,	Benjamin Silliman,*	L. C. Beck,*		
3d	April 25, 1842,	Boston,	S. G. Morton,*	C. T. Jackson,*		
4th	April 26, 1843,	Albany,	Henry D. Rogers,*	B. Silliman, jr.,*		
5th	May 8, 1844,	Washington,	John Locke,*	{ B. Silliman, jr.,* O. P. Hubbard,		
6th	April 30, 1845,	New Haven,	Wm. B. Rogers,*	{ B. Silliman, jr.,* J. Lawrence Smith,*		
7th	Sept. 2, 1846,	New York,	C. T. Jackson,*	B. Silliman, jr.,*		
8th	Sept. 20, 1847,	Boston,	Wm. B. Rogers,†*	Jeffries Wyman,*		B. Silliman, jr.*

* Deceased.

† Professor ROGERS, as chairman of this last meeting, called the first meeting of the new Association to order and presided until it was fully organized by the adoption of a constitution. As he was thus the first presiding officer of the new Association, it was directed at the Hartford meeting that his name be placed at the head of the Past Presidents of the American Association for the Advancement of Science.

MEETINGS AND OFFICERS OF THE AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE.

MEETINGS.

xi

MEETING.	DATE.	PLACE.	PRESIDENT.	VICE-PRESIDENT.	GENERAL SECRETARY.	PERMANENT SEC'Y.	TREASURER.
1st	Sept. 20, 1848,	Philadelphia, Pa.,	W. C. Redfield,*		Walter R. Johnson,*		Jeffries Wyman.*
2d	Aug. 14, 1849,	Cambridge, Mass.,	Joseph Henry,*		E. N. Horsford, 1		A. L. Elwyn.*
3d	Mar. 12, 1850,	Charleston, S. C.,	A. D. Bache,* 2		L. R. Gibbs, 3		St. J. Ravenel.* 4
4th	Aug. 19, 1850,	New Haven, Conn.,	A. D. Bache,*		E. C. Herrick,*		A. L. Elwyn.*
5th	May 5, 1851,	Cincinnati, Ohio,	A. D. Bache,*		W. B. Rogers, 5*	S. F. Baird,	S. F. Baird. 6
6th	Aug. 19, 1851,	Albany, N. Y.,	Louis Agassiz,*		W. B. Rogers,	S. F. Baird,	A. L. Elwyn.*
7th	July 28, 1853,	Cleveland, Ohio,	Benjamin Pierce,		S. St. John, 7	S. F. Baird,	A. L. Elwyn.*
8th	April 26, 1854,	Washington, D. C.,	J. D. Dana,		J. Lawrence Smith,*	Joseph Lovering,	J. L. LeConte* 8
9th	Aug. 15, 1855,	Providence, R. I.,	John Torrey,*		Wolcott Gibbs,	Joseph Lovering,	A. L. Elwyn.*
10th	Aug. 20, 1856,	Albany, N. Y.,	James Hall,		B. A. Gould,	Joseph Lovering,	A. L. Elwyn.*
11th	Aug. 12, 1857,	Montreal, Canada,	Alexis Caswell,* 9	Alexis Caswell,*	John L. LeConte,*	Joseph Lovering,	A. L. Elwyn.*
12th	April 28, 1858,	Baltimore, Md.,	Alexis Caswell,* 10	John E. Holbrook,*†	W. M. Gillespie,* 11	Joseph Lovering,	A. L. Elwyn.*
13th	Aug. 3, 1859,	Springfield, Mass.,	Stephen Alexander,*	Edward Hitchcock,*	William Chauvenet,*	Joseph Lovering,	A. L. Elwyn.*
14th	Aug. 1, 1860,	Newport, R. I.,	Isaac Lea,	B. A. Gould,	Joseph LeConte,	Joseph Lovering,	A. L. Elwyn.*
15th	Aug. 15, 1865,	Buffalo, N. Y.,	F. A. P. Barnard,	A. A. Gould,* 12	Elias Loomis, 13	Joseph Lovering,	A. L. Elwyn.†*
16th	Aug. 21, 1867,	Burlington, Vt.,	J. S. Newberry,	Wolcott Gibbs,	C. S. Lyman,	Joseph Lovering,	A. L. Elwyn.†*
17th	Aug. 5, 1868,	Chicago, Ill.,	B. A. Gould,	Charles Whittlesey,	Simon Newcomb, 14	Joseph Lovering,	A. L. Elwyn.†*
18th	Aug. 18, 1869,	Salem, Mass.,	J. W. Foster,*	O. N. Rood,	O. C. Marsh,	F. W. Putnam, 15	A. L. Elwyn.†*
19th	Aug. 17, 1870,	Troy, N. Y.,	T. S. Hunt, 16	T. S. Hunt,	F. W. Putnam, 17	Joseph Lovering,	A. L. Elwyn.†*
20th	Aug. 16, 1871,	Indianapolis, Ind.,	Asa Gray,	G. F. Barker,	F. W. Putnam,	Joseph Lovering,	W. S. Vaux.*
21st	Aug. 15, 1872,	Dubuque, Iowa,	J. Lawrence Smith,*	Alex. Winchell,	E. S. Morse,	Joseph Lovering,	W. S. Vaux.*
22d	Aug. 20, 1873,	Portland, Me.,	Joseph Lovering,	A. H. Worthen,†	C. A. White,	F. W. Putnam,	W. S. Vaux.*
23d	Aug. 12, 1874,	Hartford, Conn.,	J. L. LeConte,*	C. S. Lyman,	A. C. Hamlin,	F. W. Putnam,	W. S. Vaux.†*

1. In place of Jeffries Wyman, *not present*.
2. In place of Joseph Henry, *not present*.
3. In place of E. C. Herrick, *not present*.
4. In place of A. L. Elwyn, *not present*.
5. In place of F. C. Herrick, *not present*.
6. In place of A. L. Elwyn, *not present*.
7. In place of J. D. Dana, *not present*.
8. In place of A. L. Elwyn, *not present*.
9. In place of J. W. Baily, *deceased*.
10. In place of Jeffries Wyman, *not present*.
11. In place of Wm. Chauvenet, *too ill to be present*.
12. In place of R. W. Gibbs, *not present*.
13. In place of W. P. Trowbridge, *not present*.
14. In place of A. P. Kuckwell, *called home 1st day*.
15. In place of Joseph Lovering, *in Europe*.
16. In place of Wm. Chauvenet, *too ill to be present*.
17. In place of C. F. Hartt, *in Brazil*.
* Deceased. † Not present at the meeting.

MEETINGS AND OFFICERS OF THE ASSOCIATION (Continued).

MEET- ING.	DATE.	PLACE.	PRESIDENT.	VICE PRESIDENT, SECTION A.	VICE PRESIDENT, SECTION B.	CHAIRMAN OF PERMANENT SUBSECTION OF CHEMISTRY.	CHAIRMAN OF PERMANENT SUBSECTION OF ANTHROPOLOGY.	CHAIRMAN OF PERMANENT SUBSECTION OF MICROSCOPY.	CHAIRMAN OF PERMANENT SUBSECTION OF ENTOMOLOGY.
24th	Aug. 11, 1875.	Detroit, Mich.,	J. E. Hilgard,	H. A. Newton,	J. W. Dawson,	S. W. Johnson,	L. H. Morgan,*	—	—
25th	Aug. 23, 1876.	Buffalo, N. Y.,	W. B. Rogers,*	C. A. Young,	E. S. Morse,	G. F. Barker,	L. H. Morgan,*	R. H. Ward,	—
26th	Aug. 29, 1877.	Nashville, Tenn.,	S. Newcomb,	R. H. Thurston, ¹	O. C. Marsh,	N. T. Lupton,	Daniel Wilson, [†]	R. H. Ward,	—
27th	Aug. 21, 1878.	St. Louis, Mo.,	O. C. Marsh,	R. H. Thurston,	Aug. R. Grote,	F. W. Clarke,	— ²	R. H. Ward, ³	—
28th	Aug. 27, 1879.	Saratoga, N. Y.,	G. F. Barker,	S. P. Langley,	J. W. Powell,	F. W. Clarke, ⁴	Daniel Wilson,	E. W. Morley,	—
29th	Aug. 25, 1880.	Boston, Mass.,	L. H. Morgan,*	Asaph Hall,	Alex. Agassiz,	J. M. Ordway,	J. W. Powell,	S. A. Lattimore,	—
30th	Aug. 17, 1881.	Cincinnati, Ohio,	G. J. Brush,	Wm. Harkness, ⁷	E. T. Cox, ⁸	G. C. Caldwell, ⁹	G. Mallery,	A. B. Hervey,	J. G. Morris.

PERMANENT SECRETARY.	GENERAL SECRETARY.	SECRETARY OF SECTION A.	SECRETARY OF SECTION B.	SECRETARY OF PERMANENT SUBSECTION OF CHEMISTRY.	SECRETARY OF PERMANENT SUBSECTION OF ANTHROPOLOGY.	SECRETARY OF PERMANENT SUBSECTION OF MICROSCOPY.	SECRETARY OF PERMANENT SUBSECTION OF ENTOMOLOGY.	TREASURER.
F. W. Putnam,	S. H. Scudder,	S. P. Langley,	E. S. Morse,	F. W. Clarke,	F. W. Putnam,	—	—	W. S. Vaux.*
F. W. Putnam,	T. C. Mendenhall,	T. C. Mendenhall,	Albert H. Tuttle,	H. C. Bolton,	O. T. Mason,	E. W. Morley,	—	W. S. Vaux.*
F. W. Putnam,	Aug. R. Grote,	H. C. Bolton,	Wm. H. Dall,	P. Schweitzer,	— ²	T. O. Summers, Jr.,	—	W. S. Vaux, [†] *
F. W. Putnam,	H. C. Bolton,	F. E. Nipher,	George Little,	A. P. S. Stuart,	— ²	G. J. Engelmann,	—	W. S. Vaux, [†] *
F. W. Putnam,	H. C. Bolton, ⁵	J. K. Rees,	W. H. Dall, ⁶	W. R. Nichols,	J. G. Henderson,	A. B. Hervey,	—	W. S. Vaux, [†] *
F. W. Putnam,	J. K. Rees,	H. B. Mason,	C. V. Riley,	C. E. Munroe,	J. G. Henderson,	A. B. Hervey,	—	W. S. Vaux.*
F. W. Putnam,	C. V. Riley,	E. T. Tappan, ¹⁰	Wm. Saunders,	A. Springer, ¹²	J. G. Henderson,	W. H. Seaman, ¹¹	B. P. Mann,	W. S. Vaux, [†] *

¹ In the absence of E. C. Pickering.⁴ In the absence of Ira Remsen.⁷ In the absence of A. M. Mayez.¹⁰ In the absence of John Trowbridge.

* Deceased.

² The Sub-section united with Sec. B.⁶ In the absence of George Little.⁸ In the absence of George Engelmann.¹¹ In the absence of S. P. Sharples.[†] Not present³ In the absence of G. S. Blackie.⁶ In the absence of A. C. Wetherby.⁹ In the absence of W. R. Nichols.¹² In place of H. W. Wiley, called away.

MEETINGS AND OFFICERS OF THE ASSOCIATION. (Continued.)

MEETING.	DATE.	PLACE.	PRESIDENT.	VICE PRESIDENTS.				
				Section A.	Section B.	Section C.	Section D.	Section E.
31st	Aug. 23, 1882.	Montreal, Can.	J. W. Dawson,	W. A. Rogers, ¹	F. C. Mendenhall,	H. C. Bolton,	W. P. Trowbridge,	E. T. Cox,
32nd	Aug. 15, 1883.	Minneapolis, M.	C. A. Young,	W. A. Rogers,	H. A. Rowland,	E. W. Morley,	De Volsen Wood, ⁷	C. H. Hitchcock,
33rd	Sept. 3, 1884.	Philadelphia, Pa.	J. P. Lesley,	H. T. Eddy,	J. Trowbridge,	J. W. Langley,	R. H. Thurston,	N. H. Winchell,

VICE PRESIDENTS.					Permanent Secretary.	General Secretary.	Assistant Gen. Secretary.	SECRETARIES OF SECTIONS.	
Section F.	Section G.	Section H.	Section I.					Section A.	Section B.
W. H. Dall, A. H. Tuttle,	Alex. Winchell, ²	E. B. Elliott,			F. W. Putnam,	Wm. Saunders,	J. R. Eastman,	H. T. Eddy,	C. S. Hastings,
W. J. Beal, J. D. Cox,	O. T. Mason,	F. B. Hough,			F. W. Putnam,	J. R. Eastman,	Alfred Springer,	G. W. Hough, ⁸	F. E. Nipher, ⁹
E. D. Cope, T. G. Wormley,	E. S. Morse,	John Eaton,			F. W. Putnam,	Alfred Springer,	C. S. Minot, ¹²	G. W. Hough,	N. D. C. Hodges,

SECRETARIES OF THE SECTIONS.					Treasurer.		
Section C.	Section D.	Section E.	Section F.	Section G.	Section H.	Section I.	
Alfred Springer, J. B. Webb, ³	H. S. Williams, ⁴	Wm. Osler, ⁵	Robt. Brown, jr.,	O. T. Mason,	F. B. Hough, ^{6*}	William Lilly.	-----*
J. W. Langley, ¹⁰ J. B. Webb, ¹¹	A. A. Julien,	S. A. Forbes,	Carl Selter,	G. H. Perkins,	Jos. Cummings,	William Lilly.	
H. Carmichael, ¹³ J. B. Webb,	E. A. Smith,	C. E. Bessey,	R. Hitchcock,	G. H. Perkins, ¹⁴	C. W. Smiley,	William Lilly.	

1 In the absence of William Harkness.
2 In the absence of Daniel Wilson.
3 In the absence of C. B. Doolley.
4 In the absence of C. E. Dutton.
5 In the absence of C. S. Minot.

6 F. B. Hough was called home and J. B. Dodge acted at the close of the meeting.
7 Absent but place was not filled.
8 In the absence of W. W. Johnson.
9 In the absence of C. E. Wedd.
* Deceased

10 W. M. McMurtrie, last three days of meeting.
11 Pro tempore.
12 In the absence of E. S. Holden.
13 In the absence of R. B. Wader.
14 In the absence of W. H. Holmes.

COMMONWEALTH OF MASSACHUSETTS.

IN THE YEAR ONE THOUSAND EIGHT HUNDRED AND SEVENTY-FOUR.

AN ACT

TO INCORPORATE THE "AMERICAN ASSOCIATION FOR THE
ADVANCEMENT OF SCIENCE."

Be it enacted by the Senate and House of Representatives, in General Court assembled, and by the authority of the same, as follows :

SECTION 1. Joseph Henry of Washington, Benjamin Pierce of Cambridge, James D. Dana of New Haven, James Hall of Albany, Alexis Caswell of Providence, Stephen Alexander of Princeton, Isaac Lea of Philadelphia, F. A. P. Barnard of New York, John S. Newberry of Cleveland, B. A. Gould of Cambridge, T. Sterry Hunt of Boston, Asa Gray of Cambridge, J. Lawrence Smith of Louisville, Joseph Lovering of Cambridge and John LeConte of Philadelphia, their associates, the officers and members of the Association, known as the "American Association for the Advancement of Science," and their successors, are hereby made a corporation by the name of the "American Association for the Advancement of Science," for the purpose of receiving, purchasing, holding and conveying real and personal property, which it now is, or hereafter may be, possessed of, with all the powers and privileges, and subject to the restrictions, duties and liabilities set forth in the general laws which now or hereafter may be in force and applicable to such corporations.

SECTION 2. Said corporation may have and hold by purchase, grant, gift or otherwise, real estate not exceeding one hundred thousand dollars in value, and personal estate of the value of two hundred and fifty thousand dollars.

SECTION 3. Any two of the corporators above named are hereby authorized to call the first meeting of the said corporation in the month of August next ensuing, by notice thereof "by mail," to each member of the said Association.

SECTION 4. This act shall take effect upon its passage.

HOUSE OF REPRESENTATIVES, March 10, 1874.

Passed to be enacted,

JOHN E. SANFORD, *Speaker*.

IN SENATE, March 17, 1874.

Passed to be enacted,

GEO. B. LORING, *President*.

March 19, 1874.

Approved,

W. B. WASHBURN.

SECRETARY'S DEPARTMENT,

Boston, April 3, 1874.

A true copy, Attest:

DAVID PULSIFER,

Deputy Secretary of the Commonwealth.

CONSTITUTION

OF THE

AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE.

Incorporated by Act of the General Court of the Commonwealth of Massachusetts.

OBJECTS.

ARTICLE 1. The objects of the Association are, by periodical and migratory meetings, to promote intercourse between those who are cultivating science in different parts of America, to give a stronger and more general impulse and more systematic direction to scientific research, and to procure for the labors of scientific men increased facilities and a wider usefulness.

MEMBERS, FELLOWS, PATRONS AND HONORARY FELLOWS.

ART. 2. The Association shall consist of Members, Fellows, Patrons, and Honorary Fellows.

ART. 3. Any person may become a Member of the Association upon recommendation in writing by two members or fellows, nomination by the Standing Committee, and election by a majority of the members and fellows present in General Session.

ART. 4. Fellows shall be nominated by the Standing Committee from such of the members as are professionally engaged in science, or have by their labors aided in advancing science. The election of fellows shall be by ballot and a majority vote of the members and fellows present in General Session.

ART. 5. Any person paying to the Association the sum of one thousand dollars shall be classed as a Patron, and shall be entitled to all the privileges of a member and to all its publications.

ART. 6. Honorary Fellows of the Association, not exceeding three for each section, may be elected; the nominations to be made by the Standing Committee and approved by ballot in the respective sections before election by ballot in General Session. Honorary Fellows shall be entitled to all the privileges of fellows and shall be exempt from all fees and assessments, and entitled to all publications of the Association issued after the date of their election.

ART. 7. The name of any member or fellow two years in arrears for annual dues shall be erased from the list of the Association, provided that two notices of indebtedness, at an interval of at least three months, shall have been given; and no such person shall be restored until he has paid his arrearages or has been reëlected. The Standing Committee shall have power to exclude from the Association any member or fellow, on satisfactory evidence that said member or fellow is an improper person to be connected with the Association, or has in the estimation of the Committee made improper use of his membership or fellowship.

ART. 8. No member or fellow shall take part in the organization of, or hold office in, more than one section at any one meeting.

OFFICERS.

ART. 9. The Officers of the Association shall be elected by ballot in General Session from the fellows, and shall consist of a President, a Vice President from each section, a Permanent Secretary, a General Secretary, an Assistant General Secretary, a Treasurer, and a Secretary of each Section; these, with the exception of the Permanent Secretary, shall be elected at each meeting for the following one, and, with the exception of the Treasurer and the Permanent Secretary, shall not be reëligible for the next two meetings. The term of office of Permanent Secretary shall be five years.

ART. 10. The President, or, in his absence, the senior Vice President present, shall preside at all General Sessions of the Association and at all meetings of the Standing Committee. It shall also be the duty of the President to give an address at a General Session of the Association at the meeting following that over which he presided.

ART. 11. The Vice Presidents shall be the chairmen of their respective Sections, and of their Sectional Committees, and it shall be part of their duty to give an address, each before his own section, at such time as the Standing Committee shall determine. The Vice Presidents may appoint temporary chairmen to preside over the sessions of their sections, but shall not delegate their other duties. The Vice Presidents shall have seniority in order of their continuous membership in the Association.

ART. 12. The General Secretary shall be the Secretary of all General Sessions of the Association, and shall keep a record of the business of these sessions. He shall receive the records from the Secretaries of the

Sections, which, after examination, he shall transmit with his own records to the Permanent Secretary within two weeks after the adjournment of the meeting. He shall receive proposals for membership and bring them before the Standing Committee.

ART. 13. The Assistant General Secretary shall be the Secretary of the Standing Committee. He shall give to the Secretary of each Section the titles of papers assigned to it by the Standing Committee.

ART. 14. The Permanent Secretary shall be the executive officer of the Association under the direction of the Standing Committee. He shall attend to all business not specially referred to committees nor otherwise constitutionally provided for. He shall keep an account of all business that he has transacted for the Association, and make annually a general report for publication in the annual volume of Proceedings. He shall attend to the printing and distribution of the annual volume of Proceedings, and all other printing ordered by the Association. He shall issue a circular of information to members and fellows at least three months before each meeting, and shall, in connection with the Local Committee, make all necessary arrangements for the meetings of the Association. He shall provide the Secretaries of the Association with such books and stationery as may be required for their records and business, and shall provide members and fellows with such blank forms as may be required for facilitating the business of the Association. He shall collect all assessments and admission fees, and notify members and fellows of their election, and of any arrearages. He shall receive, and bring before the Standing Committee, the titles and abstracts of papers proposed to be read before the Association. He shall keep an account of all receipts and expenditures of the Association, and report the same annually at the first meeting of the Standing Committee, and shall pay over to the Treasurer such unexpended funds as the Standing Committee may direct. He shall receive and hold in trust for the Association all books, pamphlets and manuscripts belonging to the Association, and allow the use of the same under the provisions of the Constitution and the orders of the Standing Committee. He shall receive all communications addressed to the Association during the interval between meetings, and properly attend to the same. He shall at each meeting report the names of fellows and members who have died since the preceding meeting. He shall be allowed a salary which shall be determined by the Standing Committee, and may employ one or more clerks at such compensation as may be agreed upon by the Standing Committee.

ART. 15. The Treasurer shall invest the funds received by him in such securities as may be directed by the Standing Committee. He shall annually present to the Standing Committee an account of the funds in his charge. No expenditure of the principal in the hands of the Treasurer shall be made without a unanimous vote of the Standing Committee, and no expenditure of the income received by the Treasurer shall be made without a two-thirds vote of the Standing Committee.

ART. 16. The Secretaries of the Sections shall keep the records of their respective sections, and, at the close of the meeting, give the same, including the records of subsections, to the General Secretary. They shall also be the Secretaries of the Sectional Committees. The Secretaries shall have seniority in order of their continuous membership in the Association.

ART. 17. In case of a vacancy in the office of the President, one of the Vice Presidents shall be elected by the Standing Committee as the President of the meeting. Vacancies in the offices of Vice President, Permanent Secretary, General Secretary, Assistant General Secretary, and Treasurer, shall be filled by nomination of the Standing Committee and election by ballot in General Session. A vacancy in the office of Secretary of a Section shall be filled by nomination and election by ballot in the Section.

ART. 18. The Standing Committee shall consist of the past Presidents, and the Vice Presidents of the last meeting, together with the President, the Vice Presidents, the Permanent Secretary, the General Secretary, the Assistant General Secretary, the Secretaries of the Sections, and the Treasurer of the current meeting, with the addition of one fellow elected from each Section by ballot on the first day of its meeting. The members present at any regularly called meeting of the Committee, provided there are at least five, shall form a quorum for the transaction of business. The Standing Committee shall meet on the day preceding each annual meeting of the Association, and arrange the programme for the first day of the sessions. The time and place of this first meeting shall be designated by the Permanent Secretary. Unless otherwise agreed upon, regular meetings of the Committee shall be held in the committee room at 9 o'clock, A. M., on each day of the meeting of the Association. Special meetings of the Committee may be called at any time by the President. The Standing Committee shall be the board of supervision of the Association, and no business shall be transacted by the Association that has not first been referred to, or originated with, the Committee. The Committee shall receive and assign papers to the respective sections; examine and, if necessary, exclude papers: decide which papers, discussions and other

proceedings shall be published, and have the general direction of the publications of the Association; manage the financial affairs of the Association; arrange the business and programmes for General Sessions; suggest subjects for discussion, investigation or reports; nominate members and fellows; and receive and act upon all invitations extended to the Association and report the same at a General Session of the Association.

ART. 19. The Nominating Committee shall consist of the Standing Committee, and one member or fellow elected by each of the Sections. It shall be the duty of this Committee to meet at the call of the President and nominate the general officers for the following meeting of the Association. It shall also be the duty of this Committee to recommend the time and place for the next meeting. The Vice President and Secretary of each Section shall be recommended to the Nominating Committee by a sub-committee consisting of the Vice President, Secretary, and three members or fellows elected by the Section.

MEETINGS.

ART. 20. The Association shall hold a public meeting annually, for one week or longer, at such time and place as may be determined by vote of the Association, and the preliminary arrangements for each meeting shall be made by the Local Committee, in conjunction with the Permanent Secretary and such other persons as the Standing Committee may designate.

ART. 21. General Sessions shall be held at 10 o'clock, A. M., unless otherwise ordered, on every day of the meeting, Sunday excepted, and at such other times as may be appointed by the Standing Committee.

SECTIONS AND SUBSECTIONS.

ART. 22. The Association shall be divided into nine Sections, namely:—A, *Mathematics and Astronomy*; B, *Physics*; C, *Chemistry, including its application to agriculture and the arts*; D, *Mechanical Science*; E, *Geology and Geography*; F, *Biology*; G, *Histology and Microscopy*; H, *Anthropology*; I, *Economic Science and Statistics*. The Standing Committee shall have power to consolidate any two or more Sections temporarily, and such consolidated Sections shall be presided over by the senior Vice President and Secretary of the Sections comprising it.

ART. 23. Immediately on the organization of a Section there shall be three fellows elected by ballot after open nomination, who, with the Vice President and Secretary, shall form its Sectional Committee. The Sectional Committees shall have power to fill vacancies in their own numbers. Meetings of the Sections shall not be held at the same time with a General Session.

ART. 24. The Sectional Committee of any Section may at its pleasure form one or more temporary Subsections, and may designate the officers thereof. The Secretary of a Subsection shall, at the close of the meeting, transmit his records to the Secretary of the Section.

ART. 25. A paper shall not be read in any Section nor Subsection until it has been received from the Standing Committee and placed on the programme of the day by the Sectional Committee.

SECTIONAL COMMITTEES.

ART. 26. The Sectional Committees shall arrange and direct the business of their respective Sections. They shall prepare the daily programmes and give them to the Permanent Secretary for printing at the earliest moment practicable. No titles of papers shall be entered on the daily programmes except such as have passed the Standing Committee. No change shall be made in the programme for the day in a Section without the consent of the Sectional Committee. The Sectional Committees may refuse to place the title of any paper on the programme; but every such title, with the abstract of the paper or the paper itself, must be returned to the Standing Committee with the reasons why it was refused.

ART. 27. The Sectional Committees shall examine all papers and abstracts referred to the sections, and they shall not place on the programme any paper inconsistent with the character of the Association; and to this end they have power to call for any paper, the character of which may not be sufficiently understood from the abstract submitted.

PAPERS AND COMMUNICATIONS.

ART. 28. All members and fellows must forward to the Permanent Secretary, as early as possible, and when practicable before the convening of the Association, full titles of all the papers which they propose to present during the meeting, with a statement of the time that each will occupy in delivery, and also such abstracts of their contents as will give a general idea of their nature; and no title shall be referred by the Standing Committee to the Sectional Committee until an abstract of the paper or the paper itself has been received.

ART. 29. If the author of any paper be not ready at the time assigned, the title may be dropped to the bottom of the list.

ART. 30. Whenever practicable, the proceedings and discussions at General Sessions, Sections and Subsections shall be reported by professional reporters, but such reports shall not appear in print as the official reports of the Association unless revised by the Secretaries.

PRINTED PROCEEDINGS.

ART. 31. The Permanent Secretary shall have the Proceedings of each meeting printed in an octavo volume as soon after the meeting as possible, beginning one month after adjournment. Authors must prepare their papers or abstracts ready for the press and forward them to the Permanent Secretary within this interval, otherwise only the abstracts or titles taken from the "title blanks" will appear in the printed volume. The Standing Committee shall have power to order the printing of any paper by abstract or title only. Whenever practicable, proofs shall be forwarded to authors for revision. If any additions or substantial alterations are made by the author of a paper after its submission to the Secretary, the same shall be distinctly indicated. Illustrations must be provided for by the authors of the papers, or by a special appropriation from the Standing Committee. Immediately on publication of the volume, a copy shall be forwarded to every member and fellow of the Association who shall have paid the assessment for the meeting to which it relates, and it shall also be offered for sale by the Permanent Secretary at such price as may be determined by the Standing Committee. The Standing Committee shall also designate the institutions to which copies shall be distributed.

LOCAL COMMITTEE.

ART. 32. The Local Committee shall consist of persons interested in the objects of the Association and residing at or near the place of the proposed meeting. It is expected that the Local Committee, assisted by the officers of the Association, will make all essential arrangements for the meeting, and issue a circular giving necessary particulars, at least one month before the meeting.

LIBRARY OF THE ASSOCIATION.

ART. 33. All books and pamphlets received by the Association shall be in the charge of the Permanent Secretary, who shall have a list of the same printed and shall furnish a copy to any member or fellow on application. Members and fellows who have paid their assessments in full shall be allowed to call for books and pamphlets, which shall be delivered to them at their expense, on their giving a receipt agreeing to make good any loss or damage and to return the same free of expense to the Secretary at the time specified in the receipt given. All books and pamphlets in circulation must be returned at each meeting. Not more than five books, including volumes, parts of volumes, and pamphlets, shall be held at one time by any member or fellow. Any book may be withheld from circulation by order of the Standing Committee.

ADMISSION FEE AND ASSESSMENTS.

ART. 34. The admission fee for members shall be five dollars in addition to the annual assessment. On the election of any member as a fellow an additional fee of two dollars shall be paid.

ART. 35. The annual assessment for members and fellows shall be three dollars.

ART. 36. Any member or fellow who shall pay the sum of fifty dollars to the Association, at any one time, shall become a Life Member and as such shall be exempt from all further assessments, and shall be entitled to the Proceedings of the Association. All money thus received shall be invested as a permanent fund, the income of which shall be used only to assist in original research, unless otherwise directed by unanimous vote of the Standing Committee.

ART. 37. All admission fees and assessments must be paid to the Permanent Secretary, who shall give proper receipts for the same.

ACCOUNTS.

ART. 38. The accounts of the Permanent Secretary and of the Treasurer shall be audited annually, by Auditors appointed by the Standing Committee.

ALTERATIONS OF THE CONSTITUTION.

ART. 39. No part of this Constitution shall be amended or annulled, without the concurrence of three-fourths of the members and fellows present in General Session, after notice given at a General Session of a preceding meeting of the Association.

ORDER OF PROCEEDINGS IN ORGANIZING A MEETING.

1. The retiring President introduces the President elect, who takes the chair.
2. Formalities of welcome of the Association as may be arranged by the Local Committee.
3. Report of the list of papers entered and their reference to the Sections.
4. Other reports.
5. Announcements of arrangements by the Local Committee.
6. Election of members.
7. Election of fellows.
8. Unenumerated business.
9. Adjournment to meet in Sections.

This order, so far as applicable, to be followed in subsequent General Sessions.

MEMBERS
OF THE
AMERICAN ASSOCIATION.
FOR THE
ADVANCEMENT OF SCIENCE.¹

PATRON.²

THOMPSON, MRS. ELIZABETH, Stamford, Conn. (22).
LILLY, GEN. WILLIAM, Mauch Chunk, Carbon Co., Pa. (28).
HERRMAN, MRS. ESTHER, 59 West 56th St., New York, N. Y. (29).

MEMBERS.³

Aaron, Eugene M., P. O. Box 916, Philadelphia, Pa. (33).
Abbot, Griffith Evans, M.D., Falls of Schuylkill, Philadelphia, Pa. (33).
Abbott, Helen C. DeS., 1509 Locust St., Philadelphia, Pa. (33).
Abert, Col. James W., Newport, Ky. (31).
Abert, S. Thayer, 1907 Pennsylvania Avenue, Washington, D. C. (30).
Adams, Frank, 41 McGill College Avenue, Montreal, Can. (29).
Adams, John S., M. D., Oakland, Cal. (29).
Adams, Capt. Robert C., Montreal, Can. (31).
Agard, Dr. A. H., 1259 Alice St., Oakland, Alameda Co., Cal. (28).
Agnew, Dr. Cornelius R., 266 Madison Ave., New York, N. Y. (32).

¹The numbers in parentheses indicate the meeting at which the member was elected. The Constitution requires that the names of all members two or more years in arrears shall be omitted from the list, but their names will be restored on payment of arrearages. Members not in arrears are entitled to the annual volume of Proceedings bound in paper. *The payment of ten dollars at one time entitles a member to the subsequent volumes bound in cloth, or by the payment of twenty dollars, to the volumes bound in half morocco.*

²Persons contributing one thousand dollars or more to the Association are classed as Patrons, and are entitled to the privileges of members and to the publications. The names of Patrons are to remain permanently on the list.

³Any Member or Fellow may become a Life Member by the payment of fifty dollars. The money derived from Life Memberships is invested as a fund, the income of which is to be used only to aid in original research. Life Members are exempt from the annual assessment, and are entitled to the annual volume. The names of Life Members are printed in small capitals in the regular list of Members and Fellows.

- Aher, Mrs. Mary R. Alling, care Rev. H. Alling, South Cairo, Greene Co., N. Y. (29).
- Ainslie, Charles N., Rochester, Minn. (32).
- Alden, Prof. Geo. I., Worcester, Mass. (33).
- Alexander, Miss Jane, Jamaica Plain, Mass. (33).
- Allderdice, Wm. H., U. S. Navy, care Navy Dep't, Washington, D. C. (33).
- Allen, Edmund T., 404 Market St., St. Louis, Mo. (27).
- Allen, J. M., Hartford, Conn. (22).
- Allen, Jno. R., Linwood, Del. Co., Pa. (33).
- Alling, J. C., Hasbrouck Institute, 109 Grand St., Jersey City, N. J. (31).
- Allison, Henry, Fort Worth, Texas (32).
- Alvord, Benj., Lieut. U. S. A., Fort Hays, Kan. (33).
- Anderson, Newton M., Columbus, Ohio (30).
- Andrews, L. W., Ph. D., Springfield, Mass. (31).
- Ansley, Clark F., Swedona, Mercer Co., Ill. (32).
- Antisell, Thomas, M.D., 1311 Q St., Washington, D. C. (33).
- Appleton, Rev. Edw. W., D.D., Ashbourne P. O., Montgomery Co., Pa. (28).
- Apthorp, Henry, Ashtabula, Ohio (32).
- Archambault, U. E., P. O. Box 1944, Montreal, Can. (31).
- Armstrong, Lucius H., St. Nicholas, Duval Co., Fla. (30).
- Armstrong, Mrs. Lucius H., St. Nicholas, Duval Co., Fla. (30).
- Arnold, Lauren B., Rochester, N. Y. (30).
- Atkinson, Jno. B., Earlington, Hopkins Co., Ky. (26).
- Atwater, Richard M., Millville, N. J. (29).
- Atwood, E. S., East Orange, N. J. (29).
- Atwood, Oscar, Rutland, Vt. (31).
- Auchincloss, Wm. S., 209 Church St., Philadelphia, Pa. (29).
- Aughey, Prof. Samuel, Univ. of Nebraska, Lincoln, Neb. (29).
- Austin, Miss Mary, Mattapan Station, Milton, Mass. (31).
- Avila, A. F. de, Ithaca, N. Y. (33).
- Ayres, Prof. Brown, Tulane University, New Orleans, La. (31).
- Ayres, Dr. S. C., 64 W. 7th St., Cincinnati, Ohio (30).
- Babbitt, John, Fredericton, N. B. (29). [32].
- Babbitt, Miss Franc E., P. O. Box 75, Little Falls, Morrison Co., Minn.
- Babcock, Geo. H., 30 Cortlandt St., New York, N. Y. (33).
- Babcock, S. Moulton, N. Y. Agric. Experiment Station, Geneva, N. Y. (33).
- Bailey, E. H. S., Lawrence, Douglas Co., Kan. (25).
- Baker, Frank, M. D., 326 C St., N. W., Washington, D. C. (31).
- Baker, Prof. I. O., Illinois Industrial Univ., Champaign, Ill. (30).
- Baker, Richard D., 1414 Arch St., Philadelphia, Pa. (33).
- Baker, Prof. T. R., Millersville, Lancaster Co., Pa. (22).
- Balderston, C. Canby, Westtown, Chester Co., Pa. (33).

- Baldwin, Miss Mary A., Summer Ave., Cor. Kearney St., Newark, N. J. (31).
- Baldwin, Very Rev. Dean Maurice S., Montreal, Can. (31).
- Balen, Abraham D., Plainfield, N. J. (31).
- Ballard, Harlan H., Lenox, Mass. (31).
- Ballou, Wm. Hosea, 120 Broadway, New York, N. Y. (29).
- Banes, Charles H., 2416 Spring Garden St., Philadelphia, Pa. (31).
- Baptie, George, Normal School, Ottawa, Ontario, Can. (29).
- Barber, John N., Minneapolis, Minn. (33).
- Bardeen, Francis L., M. D., Washington College, Chestertown, Md. (32).
- Barge, B. F., Mauch Chunk, Pa. (33).
- Barker, Mrs. Martha M., care of H. R. Barker, 8 and 10 Central St., Lowell, Mass. (31).
- Barnes, Charles J. (27).
- Barnes, Prof. Chas. R., 297 Columbia St., Lafayette, Ind. (33).
- Barns, Carl, Ph.D., National Museum, Washington, D. C. (33).
- Bartlett, Dr. Homer L., Flatbush, L. I. (28).
- Bartley, Elias H., M.D., 401 Pacific St., Brooklyn, N. Y. (33).
- Bassett, Daniel A., Crawfordsville, Ind. (29).
- BASSNETT, THOMAS, Box 936, Jacksonville, Fla. (8).
- Bassnett, Mrs. Thomas, Box 936, Jacksonville, Fla. (24).
- Bastian, Dr. David I., Clinton, Worcester Co., Mass. (25).
- Bastin, Prof. E. S., Highland Park, Chicago, Ill. (29).
- Batchelor, Charles, Electrician, Menlo Park, N. J. (28).
- Bates, Henry Hobart, M.A., U. S. Patent Office, Washington, D. C. (33).
- Batterson, J. G., Hartford, Conn. (23).
- Battle, Herbert B., N. C. Agric. Experiment Station, Raleigh, N. C. (33).
- Baylor, James B., U. S. C. and G. Survey Office, Washington, D. C. (33).
- Bayne, Prof. Herbert A., Ph.D., Royal Military College, Kingston, Ont. (29).
- Beach, Charles M., Merchant, Hartford, Conn. (23).
- Beach, J. Watson, Merchant, Hartford, Conn. (23).
- Beach, William H., Madison, Wis. (21).
- Beadle, Delos W., St. Catharines, Ontario, Can. (31).
- Beall, Thomas, Lindsay, Ontario, Can. (31).
- Bean, Thos. E., Box 441, Galena, Ill. (28).
- Beard, Richard O., M. D., 1221 Nicollet Ave., Minneapolis, Minn. (32).
- Beardsley, Prof. Arthur, Swarthmore College, Swarthmore, Del. Co., Pa. (33).
- Beatty, Prof. James, Jr., 92 Dugan's Wharf, Baltimore, Md. (33).
- Beaudry, J. Alphonse U., 97 St. James St., Montreal, Can. (31).
- Beauregard, Gen. Gustave T., 359 St. Charles Ave., New Orleans, La. (30).
- Bechdolt, Adolphus F., Mankato, Minn. (32).
- Belknap, Chas., Lieut. U. S. N., Annapolis, Md. (29).
- Belknap, Morris B., Louisville, Ky. (29).

- Belknap, Wm. B., Louisville, Ky. (29).
 Bell, Alex. Melville, 1525 35th St., Washington, D. C. (31).
 Bell, Chichester A., Washington, D. C. (33).
 Bell, John J., Exeter, N. H. (22).
 Bell, Thomas D., McGill College, Montreal, Can. (31).
 Bemis, Hon. A. S., President of the Common Council, Buffalo, N. Y. (25).
 Bemrose, Joseph, 158 P. O., Montreal, Can. (31).
 Benjamin, E. B., 6 Barclay St., New York, N. Y. (19).
 Benjamin, Marcus, 43 East 67th St., New York, N. Y. (27).
 Bennett, Prof. Wm. Z., Wooster, Wayne Co., Ohio (33). [(33).
 Berg, Walter G., Ass't Eng. Lehigh Valley R. R. Co., Mauch Chunk, Pa.
 Best, Wm. F., 74 Germain St., St. John, N. B. (29).
 Beveridge, David, 250 Hennepin Ave., Minneapolis, Minn. (33).
 Bickmore, Mrs. Albert S., 12 East 41st St., New York, N. Y. (31).
 Biddle, Wm. F., 209 So. 3rd St., Philadelphia, Pa. (33).
 Bierstadt, Albert, Brevoort House, New York, N. Y. (28).
 Bigelow, A. T., D. D. S., Bismarck, Dakota (32).
 Bigelow, Otis, 1501 18th St., N. W., Washington, D. C. (30).
 Bigelow, Robert P., 1501 18th St., N. W., Washington, D. C. (32).
 Bill, Charles, Springfield, Mass. (17).
 Bingham, Mrs. Martha A., Kansas City, Mo. (32).
 Birge, Charles P., Keokuk, Iowa (29).
 Blackwell, Mrs. A. B., Elizabeth, N. J. (30).
 Blaisdell, F. E., Poway, San Diego Co., Cal. (29).
 Blake, Mrs. Clarence J., 19 St. James Avenue, Boston, Mass. (29).
 Blake, Francis C., Mansfield Valley P. O., Allegheny Co., Pa. (29).
 Blaklee, Prof. T. M., Hamilton, N. Y. (31).
 Blankenburg, Rudolph, 1326 Arch St., Philadelphia, Pa. (33).
 Blatchford, Eliphalet W., 375 La Salle Ave., Chicago, Ill. (17).
 BLISH, W. G., Niles, Mich. (33).
 Blitz, Adolph, M.D., Minneapolis, Minn. (32).
 Blodget, Lorin, 1329 So. Broad St., Philadelphia, Pa. (33).
 Blount, Henry F., Evansville, Vanderburg Co., Ind. (32).
 Boardman, Miss E. D., 120 Beacon St., Boston, Mass. (29).
 Boardman, Mrs. Wm. D., 38 Kenilworth St., Roxbury, Mass. (28).
 Bocage, Miss Annie, Pine Bluff, Ark. (33).
 Boerner, Chas. G., Vevay, Ind. (29).
 Boice, Miss Carrie A., Camden, N. J. (33).
 Bolles, Prof. Albert S., Univ. of Pa., Philadelphia, Pa. (33).
 Bond, Geo. M., The Pratt and Whitney Co., Hartford, Conn. (33).
 Bond, Geo. W., Boston, Mass. (29).
 Bourke, John G., Capt. 3rd Cavalry, U. S. A., care Adj. Gen. U. S. A.,
 Washington, D. C. (33).
 Bourland, Dr. Addison M., Van Buren, Ark. (29).
 Bowers, Miss Virginia K., Appeal Office, Memphis, Tenn. (27).
 Bowles, Francis T., 1823 Jefferson Place, Washington, D. C. (33).
 Bowles, George J., 1466 St. Catherine St., Montreal, Can. (31).

- Bowles, Miss Margaretta, The Institute, Columbia, Tenn. (26).
Bowman, Chas. G., Lieut. U. S. N., Naval Observ., Washington, D. C. (33).
Bowser, Mrs. Anna C., 328 Third St., Louisville, Ky. (33).
Boyd, William, Cambridge, Mass. (29).
Boyè, M. H., Coopersburg, Lehigh Co., Pa. (33).
Boynton, Miss S. P., Box 150, Lynn, Mass. (19).
Brackett, Solomon H., St. Johnsbury, Vt. (29).
Bradford, Edward H., M.D., 150 Boylston St., Boston, Mass. (29).
Bradford, Royal B., Lt. Comd'r, U. S. N., care of Navy Dept., Washington, D. C. (31).
Braid, Andrew, Coast and Geodetic Survey Office, Washington, D. C. (33).
Braid, James W., Nashville, Tenn. (33).
Brainerd, Thos. C., P. O. Box 720, Montreal, Can. (31).
Braley, Sam'l T., Rutland, Vt. (33).
Bramwell, J. H., Roanoke, Va. (33).
Brashear, Jno. A., 3 Holt St., Pittsburg, S. S., Pa. (33).
Bray, Prof. C. D., College Hill, Mass. (29).
Brayton, Miss Sarah H., M. D., Evanston, Ill. (33).
Breckinridge, S. M., P. O. Box 2794, St. Louis, Mo. (27).
Breidenbaugh, Prof. E. S., Pennsylvania College, Gettysburg, Pa. (33).
Brice, Judge Albert G., 122 Gravier St., New Orleans, La. (32).
Bridges, Henry Seabury, M.A., University of New Brunswick, Fredericton, N. B. (33).
Bringham, Prof. W. L., Agric. and Mechan. College of Texas, College Station, Brazos Co., Texas (32).
Brinton, Daniel G., M. D., Media, Pa. (33).
Brinton, J. Bernard, M. D., 755 Corinthian Ave., Philadelphia, Pa. (33).
Brissette, Milton H., Montreal, Can. (31).
Bromfield, Rev. Edw. T., Glenbrook, Fairfield Co., Conn. (33).
Brounson, W. H., Lt. Comd'r U. S. N., Yonkers, N. Y. (31).
Bronson, E. H., Ottawa, Ontario, Can. (31).
Brooks, Miss Margarette W., Salem, Mass. (29).
Broomall, Hon. John M., Media, Delaware Co., Pa. (23).
Brosius, Lewis W., Cochranville, Chester Co., Pa. (33).
Broun, Albert P., Ph. D., 501 Federal St., Camden, N. J. (33).
Brounell, Prof. Walter A., 125 University Ave., Syracuse, N. Y. (30).
Brown, Miss Anna, 528 West 7th St., Cincinnati, Ohio (31).
Brown, Arthur, C. E., Oakland, Alameda Co., Cal. (31).
Brown, Mrs. Ashley, 115 Wilkinson St., Dayton, Ohio (25).
Brown, Prof. C. J., Atlanta, Ga. (31).
Brown, Fred. G., care of McKesson and Robbins, 93 Fulton St., New York, N. Y. (31).
Brown, Hon. John C., Vice President, Texas and Pacific R. R. Co., Pukaski, Tenn. (26).
Brown, Jonathan, 390 Broadway, Somerville, Mass. (29).

- Brown, Paul Taylor, 2206 Green St., Philadelphia, Pa. (33).
Brühl, Gustav, N. W. cor. John and Hopkins Sts., Cincinnati, Ohio (28).
Buck, C. Elton, Wilmington, Del. (29).
Buck, Henry C., West Somerville, Mass. (29).
Buckingham, Chas. L., U. S. Patent Office, Washington, D. C. (28).
Budd, Henry I., Mount Holly, N. J. (33).
Buffum, Miss Fannie A., Linden, Mass. (29).
Bulloch, Walter H., 99 W. Monroe St., Chicago, Ill. (30).
Burchard, Wm. M., M. D., Uncasville, Conn. (33).
Burdick, Edson A., 406 Spruce St., Le Droit Park, Washington, D. C. (30).
Burke, Jos. C., Middletown, Conn. (29).
Burke, William, U. S. Patent Office, Washington, D. C. (28).
Burland, Jeffrey H., Montreal, Can. (31).
Burns, Prof. James A., Box 456, Atlanta, Ga. (32).
Bush, Rev. Stephen, D. D., Waterford, N. Y. (19).
Butcher, Mrs. Z. D., Washington, D. C. (29).
Butler, A. W., Brookville, Franklin Co., Ind. (30).
Butler, Cyrus, 24 Cliff St., New York, N. Y. (29).
Butler, Nathan, 17 Johnston Block, Minneapolis, Minn. (32).
Butterfield, W. Webster, M. D., New Castle, Ind. (32).
Byrnes, R. M., M. D., cor. 5th and Race Sts., Cincinnati, Ohio (30).

Calder, Edwin E., Box 17, Providence, R. I. (29).
Caldwell, Albert G., Lt. Comd'r U. S. N., Torpedo Station, Newport, R. I. (31).
Caldwell, Dr. Frank, Cincinnati Hospital, Cincinnati, Ohio (30).
Calkins, Dr. Marshall, Springfield, Mass. (29).
Campbell, Rev. Prof. John, Presbyterian College, Montreal, Can. (31).
Campbell, Jos. Addison, 4816 Hancock St., Germantown, Pa. (33).
Canfield, Rev. Eli H., D.D., Arlington, Bennington Co., Vt. (25).
Capen, Miss Bessie T., Northampton, Mass. (23).
Cardeza, John M., M.D., Claymont, Del. (33).
Cargill, H. L., Hotel Eliot, Roxbury, Mass. (31).
Carman, Lewis, Bangall, N. Y. (29).
Caron, C. K., Louisville, Ky. (30).
Carpenter, Louis G., Agricultural College, Lansing, Mich. (32).
Carrington, Col. Henry B., U. S. A., care Adj. Gen. U. S. A., Washington, D. C. (20).
Carter, John E., Knox and Coulter Sts., Germantown, Pa. (33).
Case, Mrs. Fidelia O., Kansas City, Mo. (32).
Cassino, S. E., Naturalists' Agency, 41 Arch St., Boston, Mass. (25).
Castle, Frederick A., M. D., 55 E. 52nd St., New York, N. Y. (29).
Caswell, John H., 11 West 48th Street, New York, N. Y. (26).
Catlin, Charles A., 12 Cooke St., Providence, R. I. (33).
Chabert, L'Abbé Joseph, 80 St. Gabriel St., Montreal, Can. (31).
Chace, Arnold B., Valley Falls, R. I. (29).

- Chadbourn, Erlon R., Lewiston, Me. (29).
 Chadwick, James R., M. D., Clarendon St., Boston, Mass. (29).
 Chahoon, Mrs. Mary D., St. George's Hotel, Philadelphia, Pa. (33).
 Chamberlain, M., St. John, N. B. (32).
 Channing, Dr. Wm. F., Providence, R. I. (29).
 Chapin, Dr. J. H., Meriden, Conn. (33).
 Charbonnier, Prof. L. H., University of Georgia, Athens, Ga. (26).
 Chase, Mrs. Mariné J., 1622 Locust St., Philadelphia, Pa. (31).
 Chase, R. Stuart, 53 Summer St., Haverhill, Mass. (18).
 Chase, Thomas, Haverford College P. O., Pa. (33).
 Chatfield, A. F., Albany, N. Y. (29).
 Chester, Commander Colby M., U. S. N., Hydrographic Inspector, Coast
 Survey Office, Washington, D. C. (28).
 Chester, Prof. Frederick D., Delaware State College, Newark, Del.
 (33).
 Child, Charles F., 223 E. Main St., Richmond, Va. (33).
 Childe, John Healey, Boston, Mass. (31).
 Christie, James, Pencoyd, Pa. (33).
 Cisco, J. G., Jackson, Tenn. (29).
 Clapp, Geo. H., 98 Fourth Ave., Pittsburg, Pa. (33).
 Clark, Alex S., Westfield, N. J. (33).
 Clark, John S., 7 Park St., Boston, Mass. (31).
 Clark, Patrick, Rahway, N. J. (33).
 Clark, Simeon T., M.D., 103 Genesee St., Lockport, Niagara Co., N. Y.
 (25).
 Clark, Wm. Brewster, M.D., 133 W. 34th St., New York, N. Y. (33).
 Clarke, Prof. John M., Northampton, Mass. (31).
 Clarke, Robert, Cincinnati, Ohio (30).
 Clement, F. H., Everett, Pa. (33).
 Cleveland, J. L., 547 W. 8th St., Cincinnati, Ohio (30).
 Cloud, Jno. W., Altoona, Pa. (28).
 Coakley, George W., LL.D., Hempstead, L. I. (29).
 Cobb, Samuel C., 235 Boylston St., Boston, Mass. (29).
 Coe, Henry W., M. D., Mandan, Dakota (32).
 Coffin, Amory, Phoenixville, Pa. (31).
 Coffinberry, W. L., 135 Summit St., Grand Rapids, Mich. (20).
 Cogswell, W. B., Syracuse, N. Y. (33).
 Coit, James M., Ph.D., Saint Paul's School, Concord, N. H. (33).
 Colburn, Dr. E. M., 207 So. Jefferson St., Peoria, Ill. (33).
 Colburn, Richard T., Elizabeth, N. J. (31).
 Colby, C. E., M. E., School of Mines, Columbia College, New York, N. Y.
 (28).
 Cole, Frederick, 1394 St. Catherine St., Montreal, Can. (31).
 Colie, Edw. M., East Orange, N. J. (30).
 Collin, Prof. Alonzo, Cornell College, Mount Vernon, Iowa (21).
 Colman, Henry, M.D., 34 Nahant St., Lynn, Mass. (25).
 Colton, G. Woolworth, 182 William St., New York, N. Y. (22).

- Comer, Harris, 624 Locust St., Philadelphia, Pa. (33).
Compton, Murat, Bradford, McKean Co., Pa. (32).
Comstock, Dr. T. Griswold, 507 North 14th St., St. Louis, Mo. (29).
Conant, E. Ida, 139 West 45th St., New York, N. Y. (33).
Conklin, W. A., Director Central Park Menagerie, New York, N. Y. (29).
Conro, Miss Emma O., Keeseville, N. Y. (31).
Constable, Casimir, Constableville, N. Y. (29).
Cook, Dr. Charles D., 133 Pacific St., Brooklyn, N. Y. (25).
Cooley, Prof. Mortimer E., Univ. of Mich., Ann Arbor, Mich. (33).
Coon, Henry C., M. D., Alfred Centre, N. Y. (29).
Cope, Miss Mary S., Aubury, Germantown, Pa. (33).
Cope, Thos. P., Walnut Lane, Germantown, Pa. (33).
Costin, Rev. M. P., St. Jno. College, Fordham, N. Y. (30).
Couzins, Miss Phoebe W., LL.B., 2647 Washington Ave., St. Louis, Mo. (27).
Cowan, Richard Wm., 416 Notre Dame St., Montreal, Can. (31).
Cowdry, Thomas, M. D., Toronto, Can. (31).
Coxe, Miss Mary C., 1302 Pine St., Philadelphia, Pa. (33).
Crafts, Robert H., 2329 South 6th St., Minneapolis, Minn. (32).
Cragin, Francis W., Washburn College, Topeka, Kan. (29).
Cramer, A. W. Putman, 1st Ave. and 40th St., New York, N. Y. (33).
Crane, C. R., 321 Garrard St., Covington, Ky. (30).
Crawford, Prof. Morris B., Middletown, Conn. (30).
Crevier, I. A., M. D., Montreal, Can. (31).
Croasdale, Dr. Hannah T., 1433 Walnut St., Philadelphia, Pa. (33).
Crocker, Miss Lucretia, 40 Rutland Square, Boston, Mass. (29).
Crosby, Francis W., 20 Second St., N. E., Washington, D. C. (31).
Crosier, Dr. Edward S., Louisville, Ky. (29).
CROWELL, A. F., Woods Holl, Mass. (30).
Crozer, Geo. K., Upland, Pa. (33).
Crozer, Mrs. Geo. K., Upland, Pa. (33).
Crump, M. H., Col. Commanding 3d Reg. K. S. G., Bowling Green, Ky. (29).
Culin, Stewart, 127 South Front St., Philadelphia, Pa. (33).
Cummings, John, Woburn, Mass. (18).
Cunningham, Francis A., 1613 Wallace St., Philadelphia, Pa. (33).
Currier, John McNab, M. D., Castleton, Vt. (28).
Curtis, Elizabeth, 16 Beethoven St., Egleston Square, Boston, Mass. (31).
Curtiss, Abijah, Yonkers, N. Y. (31).
Cushing, Harry P., 786 Prospect St., Cleveland, Ohio (33).
Cutler, Dr. Andrew S., Kankakee, Ill. (32).
Cutter, John D., P. O. Box 276, New York, N. Y. (23).
Cutter, W. E., Box 1037, Worcester, Mass. (29).

Dale, Ben. B., 25 Wiggins Block, Cincinnati, Ohio (30).
Dale, T. Nelson, jr., Gibbs Ave., Newport, R. I. (27).

- Dana, Judge Edmund L., 379 South Main St., Wilkesbarre, Pa. (32).
Dancy, Frank B., N. C. Agric. Experiment Station, Raleigh, N. C. (33).
Daniels, Edward, St. Paul, Minn. (32).
Dansereau, C. A., Montreal, Can. (31).
Davenport, H. W. (30).
Davis, Charles C., 58 W. 3rd St., Cincinnati, Ohio (30).
Davis, E. F. C., Supt. Pottsville Shops, Pottsville, Pa. (33).
Davis, G. Pierrepont, M. D., Hartford, Conn. (29).
Davis, J. J., M. D., 1119 College Ave., Racine, Wis. (31).
Davis, Dr. John, 323 Elm St., Cincinnati, Ohio (30).
Davis, Dr. John L., 42 York St., Cincinnati, Ohio (30).
Davis, Leander S., Baker City, Baker Co., Oregon (29).
Davis, Prof. Wm. Morris, jr., Cambridge, Mass. (33).
Davison, E. W., Box 126, Baltimore, Md. (30).
Dawson, Miss Sarah M., 50 Sheridan Ave., Roxbury, Mass. (29).
Day, Austin G., 120 Broadway, New York, N. Y. (29).
Dayton, L. M., 184 W. 2nd St., Cincinnati, Ohio (31).
Dean, Dr. D. V., St. Louis, Mo. (27).
DeCamp, William H., M. D., Grand Rapids, Mich. (21).
DeForest, Henry S., Pres. Talladega College, Talladega, Ala. (32).
Degni, Rev. J. M., Woodstock College, Woodstock, Howard Co., Md. (33).
De Hass, Dr. Wills, Bureau of Ethnology, Washington, D. C. (30).
Delano, Joseph C., New Bedford, Mass. (5).
Dempsey, Peter C., Trenton, Ontario, Can. (31).
Denton, John M., London, Ontario, Can. (31).
Devereaux, Willard L., Clyde, Wayne Co., N. Y. (29).
DEVEREUX, J. H., President C. C. C. & I. R. R., Cleveland, Ohio (18).
Dewey, Fred P., Ph. B., Smithsonian Institution, Washington, D. C. (30).
DeWitt, William G., 88 Nassau St., New York, N. Y. (33).
Dexter, Julius, Cincinnati, Ohio (30).
Dickerman, Alton L., Ph. B., Somerville, Mass. (29).
Dickinson, Dwight, Surgeon U. S. N., Navy Dep't, Washington, D. C. (31).
Dickinson, Rev. John, 219 E. 27th St., New York, N. Y. (29).
Dinsmore, Prof. Thos. H., jr., York, Pa. (29).
Dinwiddie, Prof. Hardaway H., A. and M. College of Texas, College Station, Brazos Co., Texas (32).
Dixwell, Epes S., Cambridge, Mass. (1).
Dixwell, Geo. B., 553 Shawmut Ave., Boston, Mass. (29).
Dodd, Charles W., Mt. Auburn, Cincinnati, Ohio (30).
Doggett, Geo. N., Chicago, Ill. (33).
Donnelly, Ignatius, Hastings, Minn. (31).
Doolittle, Prof. C. L., South Bethlehem, Pa. (25).
Doughty, John W., 165 Johnston St., Newburgh, N. Y. (19).
Douglass, Andrew E., P. O. Box 605, New York, N. Y. (31).
Drowne, Prof. Charles, care Wm. L. Drowne, Esq., Canaan Four Corners, N. Y. (6).

- Drysdale, William, Montreal, Can. (31).
 Du Bois, C. H., Minneapolis, Minn. (31).
 Du Bois, Patterson, Ass't Assayer, U. S. Mint, Philadelphia, Pa. (33).
 Duff, Mrs. W. L., W. 140 St., between Boulevard and Hudson River, New York, N. Y. (29).
 Dummer, Edward, 19 Tremont Row, Boston, Mass. (31).
 Dun, Dr. Walter A., Cincinnati, Ohio (31).
 Dunbar, L. L., D. D. S., 23 Kearny St., San Francisco, Cal. (31).
 Dunham, Carroll, jr., 98 Boylston St., Boston, Mass. (31).
 Dunham, Edw. K., 329 Beacon St., Boston, Mass. (30).
 DuPont, Francis G., Wilmington, Del. (33).
 Du Pré, Prof. Daniel A., Spartanburg, S. C. (28).
 Durell, Prof. Fletcher, A.M., Dickinson College, Carlisle, Pa. (33).
 Durfee, Matthew C., A. B., care Bedford Stone Co., Cleveland, Ohio (30).
 Durfee, W. F., 89 Courtland St., Bridgeport, Conn. (33).
 Dury, Henry M., 707 Woodland St., Nashville, Tenn. (33).
 Dusenberre, Geo. B., Geneva, N. Y. (33).
 Dyer, Clarence M., Lawrence, Mass. (22).

 Eastman, Dr. Arthur M., St. Paul, Minn. (32).
 Eaton, Harlow W., Ph. D., Male High School, Louisville, Ky. (32).
 Eaton, Prof. James R., Liberty, Mo. (29).
 Eccles, Robert G., M. D., 94 Smith St., Brooklyn, N. Y. (31).
 Edelheim, Carl, 2006 Arch St., Philadelphia, Pa. (33).
 Edwards, J. Baker, Montreal, Can. (31).
 Edwards, J. M., Marlborough, Mass. (29).
 Edwards, J. T., D. D., Randolph, N. Y. (31).
 Edwards, J. W., Delaware Ave. and Green St., Philadelphia, Pa. (32).
 Edwards, W. F., Niles, Mich. (33).
 Edwards, Wm. H., Coalburgh, Kanawha Co., W. Va. (30).
 Elder, Mrs. Susan B., New Orleans, La. (32).
 Elkin, William L., Yale College Observ., New Haven, Conn. (33).
 Elliot, Dr. A. F., Minneapolis, Minn. (30).
 Elliott, William, care Riggs & Co., 56 Wall St., New York, N. Y. (30).
 Ellis, Wm. Hodgson, School of Practical Science, Toronto, Canada (25).
 Elmer, Howard N., St. Paul, Minn. (32).
 Ely, Theo. N., Supt. Motive Power, Penn. R. R., Altoona, Pa. (29).
 Embick, F. B., Williamsport, Pa. (32).
 Emerson, Lowe, cor. John and Findlay Sts., Cincinnati, Ohio (30).
 Emerson, Rev. Samuel, Univ. of Va., Va. (32).
 Emmerton, Mrs. W. H., Salem, Mass. (26).
 Endemann, Hermann, Ph. D., 33 Nassau St., New York, N. Y. (26).
 ESTES, DANA, 301 Washington St., Boston, Mass. (29).
 Evans, Edwin, M. D., Streator, La Salle Co., Ill. (30).
 Evans, H. Sugden, Chief Analyst for the Dominion, Inland Revenue Dept., Ottawa, Can. (31).
 Evers, Edw., M. D., 1861 North Market St., St. Louis, Mo. (28).

- Ewing, Addison L., 425 W. 57th St., New York, N. Y. (33).
 Eyerman, John, Easton, Pa. (33).
- Failyer, Prof. George H., Manhattan, Kansas (32).
 Fairfield, Frank H., So. Duxbury, Mass. (31).
 Falconer, Wm., Botanic Garden, Cambridge, Mass. (29).
 Fallon, John, Lawrence, Mass. (30).
 Fanning, John T., Manchester, N. H. (29).
 Farden, Thomas, Rugby, Tenn. (32).
 Farnam, Charles H., New Haven, Conn. (25).
 Farnam, Prof. J. E., Georgetown College, Georgetown, Ky. (26).
 Farnam, William W., New Haven, Conn. (28).
 Farnsworth, P. J., M. D., Clinton, Iowa (32).
 Farquhar, Henry, Coast Survey Office, Washington, D. C. (33).
 Farr, Henry L., Box 365, Rutland, Vt. (31).
 Farrar, Miss Elizabeth, 62 Lake Ave., Rochester, N. Y. (29).
 Fearing, Clarence W., Mass. Inst. Technology, Boston, Mass. (29).
 Feemster, J. H., 437 Broadway, Cincinnati, Ohio (30).
 Felton, S. M., Box 2126, Philadelphia, Pa. (29).
 Fenton, Wm., Saint Paul, Minn. (33).
 Fenwick, A. G., M. D., London, Ontario, Can. (31).
 Fernow, Bernhard E., Slatington, Pa. (31).
 Ferrier, James, jr., 144 Metcalfe St., Montreal, Can. (31).
 Ferrier, Walter F., 144 Metcalfe St., Montreal, Can. (31).
 Fielde, Miss Adele M., 9 Murray St., New York, N. Y. (33).
 Finley, E. B., Bucyrus, Ohio (33).
 Firmstone, F., Easton, Pa. (33).
 Fish, Chas., Brunswick, Me. (29).
 Fisher, Chas. H., Sec. State Board of Health, Providence, R. I. (29).
 Fisher, Miss Ellen F., Lake Erie Seminary, Painesville, Ohio (33).
 Fisher, Hon. L. C., Galveston, Texas (32).
 Fitch, Dr. W. H., Rockford, Ill. (29).
 Fitz, Prof. Newton, Norfolk, Va. (30).
 Fleming, Sanford, Chancellor of Queen's Univ., Ottawa, Can. (31).
 Fletcher, C. R., P. O. Box 500, Tucson, Arizona. (29).
 Fletcher, Lawrence B., Marlboro', N. Y. (29).
 Flint, Albert S., U. S. Naval Observatory, Washington, D. C. (30).
 Flint, D. B., Watertown, Mass. (25).
 Folger, Lt. Comd'r Wm. M., U. S. N., Care Bureau of Ordnance, Navy
 Dep't, Washington, D. C. (28).
 Force, Cyrus G., jr., Cleveland, Ohio (31).
 Forman, Benj. R., New Orleans, La. (30).
 FORTESCUE, MRS. MARION T., 339 West 34th St., New York, N. Y. (31).
 Fosgate, Dr. Blanchard, Auburn, N. Y. (7).
 Foster, Prof. J. H., Tuscaloosa, Ala. (33).
 Foulkes, James F., M. D., Oakland, Alameda Co., Cal. (30).
 Fox, George H., M. D., 18 East 31st St., New York, N. Y. (31).

- Fox, Prof. Joseph G., Easton, Pa. (31).
Frear, Wm., Dep't Agric., Washington, D. C. (33).
Freeman, Prof. T. J. A., St. John's College, Fordham, N. Y. (33).
Frey, S. L., Palatine Bridge, Montgomery Co., N. Y. (29).
Frick, John H., Central Wesleyan College, Warrenton, Mo. (27).
Frisbie, J. F., M. D., Box 455, Newton, Mass. (29).
Frisselle, M. M., M. D., Minneapolis, Minn. (32).
Fritts, Charles E., 42 Nassau St., New York, N. Y. (32).
Froehling, Dr. Henry (29).
FROTHINGHAM, REV. FREDERICK, Milton, Mass. (11).
FROTHINGHAM, MRS. LOIS R., Milton, Mass. (31).
Fuller, H. Weld, 17 Pemberton Square, Boston, Mass. (29).
Fulton, Prof. Robert B., University of Mississippi, Oxford, Miss. (21).
Fyles, Rev. Thomas W., South Quebec, P. Q., Can. (31).
- Gaffield, Thomas, 54 Allen St., Boston, Mass. (29).
Gaines, Richard H., Norfolk, Va. (33). [(28).
Gallaudet, Edw. M., Pres. Nat. Deaf Mute College, Washington, D. C.
Gannett, Henry, U. S. Geological Survey, Washington, D. C. (33).
Gardiner, Edw. G., Boston Soc. Nat. History, Boston, Mass. (29).
Gardiner, Rev. Frederic, jr., Sioux Falls, Dakota (29).
Gardner, Rev. Corliss B., 8 New York St., Rochester, N. Y. (29).
Gardner, Joseph, M. D., Bedford, Lawrence Co., Ind. (30).
Garnett, Algernon S., M.D., Hot Springs, Arkansas (23).
Garrett, Miss Mary R., Rosemont, Montgomery Co., Pa. (33).
Garrett, Philip C., Logan P. O., Philadelphia, Pa. (33).
Garrison, H. D., 3625 Vincennes Ave., Chicago, Ill. (31).
Garth, Charles, Montreal, Can. (31).
Gascoyne, W. J., State Dept. of Agric., Richmond, Va. (33).
Gattinger, August, M.D., Nashville, Tenn. (26).
Genth, Fred. A., jr., 4014 Chestnut St., West Philadelphia, Pa. (32).
Gentry, Thos. G., 1912 Christian St., Philadelphia, Pa. (33).
George, James N., 40 Pearl St., Boston, Mass. (29).
Geyer, Wm. E., Stevens Inst. Technology, Hoboken, N. J. (29).
Ghequier, A. de, Box 425, Baltimore, Md. (30).
Gibbs, Prof. J. Willard, New Haven, Conn. (33).
Gilbert, Benj. D., Utica, N. Y. (31).
Gilbert, Mary H., M. D., 31 W. 32nd St., New York, N. Y. (33).
Gilchrist, Miss Maude, Iowa State Normal School, Cedar Falls, Iowa (33).
Girdwood, Gilbert P., 28 Beaver Hall Terrace, Montreal, Can. (31).
Gladding, Thomas S., Box 1261, New York, N. Y. (30).
Gleeson, Thos. W., 109 Court St., Boston, Mass. (31).
Glenn, William, South Strafford, Vt. (33).
GLENNY, WILLIAM H., JR., Buffalo, N. Y. (25).
Gold, Theodore S., West Cornwall, Conn. (4).
Goldsmith, Edw., 658 North 10th St., Philadelphia, Pa. (29).
Goodnow, Henry R., 32 Remsen St., Brooklyn, N. Y. (32).

- Gordon, Prof. Jos. C., Deaf Mute College, Washington, D. C. (27).
 Gordon, Dr. T. Winslow, Georgetown, Ohio (30).
 Gordon, W. J., 53 Water St., Cleveland, Ohio (29).
 Gore, James H., Columbian College, Washington, D. C. (29).
 Gould, Dr. B. A., Cambridge, Mass. (2).
 Gould, Sylvester C., Manchester, N. H. (22).
 Graef, Edw. L., 40 Court St., Brooklyn, N. Y. (28).
 Graf, Louis, Van Buren, Crawford Co., Ark. (30).
 Grant, Angus, Montreal, Can. (31).
 Graves, C. E., D. D. S., 715 North 41st St., Philadelphia, Pa. (33).
 Gray, Arthur F., Danversport, Mass. (29).
 Green, Arthur L., Univ. of Mich., Ann Arbor, Mich. (33).
 Green, Milbrey, M. D., No. 1 Columbus Square, Boston, Mass. (29).
 Greene, Jacob L., Pres. Mut. Life Ins. Co., Hartford, Conn. (23).
 Greene, Jeanette B., M.D., 8 E. 46th St., New York, N. Y. (33).
 Greene, Thos. A., 146 Martin St., Milwaukee, Wis. (31).
 Greenleaf, John T., Owego, N. Y. (33).
 Greenleaf, R. P., M. D., Henry Clay P. O., Del. (31).
 Greenough, W. W., 24 West St., Boston, Mass. (29).
 Greve, Theodor L. A., M. D., 260 W. 8th St., Cincinnati, Ohio (30).
 Gridley, Albert L., Gilead, Oxford Co., Me. (25).
 Grinnell, George Bird, 39 Park Row, New York, N. Y. (25).
 Griscom, Wm. W., Haverford College P. O., Pa. (33).
 Grossklaus, John F., Navarre, Ohio (24).
 Grovesteen, Milton W., 430 W. 23d St., New York, N. Y. (33).
 Hacker, William, 161 Wister St., Germantown, Pa. (33).
 Hagemann, John, 106 Bank St., Cincinnati, Ohio (29).
 Haight, Stephen S., West Farms, New York, N. Y. (31).
 Hainer, Prof. Julius C., Ames, Iowa (33).
 Haines, Reuben, 123 West Chelton Ave., Germantown, Pa. (27).
 Haines, Wm. J., Cheltenham, Montgomery Co., Pa. (33).
 Halberstadt, Baird, Pottsville, Pa. (33).
 Hale, Albert C., Ph. D., Box 65, Brooklyn, N. Y. (29).
 Hale, Miss Mary, care of Hon. J. J. Clarke, Kenilworth St., Roxbury, Mass. (31).
 Hale, William H., Ph. D., Albany, N. Y. (32).
 Haliburton, R. G., Q. C., Ottawa, Can. (31).
 Hall, Clayton C., 142 Park Ave., Baltimore, Md. (33).
 Hallock, Albert P., Ph. D., 249 East 31st St., New York, N. Y. (31).
 Hallowell, Mrs. J. L., 2017 DeLancy Place, Philadelphia, Pa. (33).
 Hallowell, Miss Susan M., Wellesley College, Wellesley, Mass. (33).
 Hambach, Dr. G., 1319 Lami St., St. Louis, Mo. (26).
 HAMILTON, Jno. M., Coudersport, Potter Co., Pa. (33). [(28).
 Hammond, Geo. W., "The Hamilton," 260 Clarendon St., Boston, Mass.
 Hammond, Mrs. Geo. W., "The Hamilton," 260 Clarendon St., Boston, Mass. (29).
 Hampson, Thomas, Bureau of Education, Washington, D. C. (33).

- Harding, Prof. H. Wilson, Bethlehem, Pa. (33).
Harding, Henry, Salem, Mass. (31).
Harding, Myron H., M. D., Lawrenceburg, Ind. (30).
Hare, Hobart A., M.D., 113 So. 22nd St., Philadelphia, Pa. (33).
Hare, Prof. R. B., Hamilton, Ontario, Can. (28).
Harford, Wm. G. W., 2132 O'Farrell St., San Francisco, Cal. (29).
Hargraves, Dr. M. Elizabeth, Southbridge, Mass. (33).
Harmon, Miss A. Maria, 49 Daly St., Ottawa, Can. (31).
Harrington, W. H., Post Office Dept., Ottawa, Can. (29).
Harris, I. H., Waynesville, Warren Co., Ohio (30).
Harris, W. T., Lock Box 1, Concord, Mass. (27).
Harrison, Edwin, 322 Pine St., Room 20, St. Louis, Mo. (11).
Harrison, Geo. B., 520 E. Mulberry St., Bloomington, Ill. (29).
Harrison, Thos., LL. D., Fredericton, N. B. (29).
Hart, Charles P., M. D., Wyoming, Ohio (30).
Hart, Edw., Ph.D., Easton, Pa. (33).
Hart, Rev. Prof. Samuel, Trinity College, Hartford, Conn. (22).
Hartshorne, Dr. Henry, Germantown, Pa. (33).
Harvey, Charles W., Sup't Public Schools, Greensburg, Ind. (20).
Hasse, Hermann E., M.D., 1810 Main St., Little Rock, Ark. (33).
Hatch, Horace, M. D., 1323 F St., N. W., Washington, D. C. (31).
Hatch, P. L., M. D., 44 11th St. South, Minneapolis, Minn. (31).
Hatfield, Marcus P., M.D., Chicago Medical College, Chicago, Ill. (23).
Hathaway, Nath'l, New Bedford, Mass. (30).
Haupt, Prof. Lewis M., University of Pennsylvania, Philadelphia, Pa. (32).
Haven, Franklin, jr., New England Trust Co., Boston, Mass. (29).
Hay, Prof. Oliver P., Irvington, Marion Co., Ind. (33).
Hayes, Richard, 700 Chestnut St., St. Louis, Mo. (27).
Haywood, Prof. John, Otterbein Univ., Westerville, Ohio (30).
Hazen, Henry Allen, P. O. Box 427, Washington, D. C. (33).
Hedge, Fred. H., jr., Public Library, Lawrence, Mass. (28).
Hedges, Sidney M., 178 Devonshire St., Boston, Mass. (29).
Heighway, A. E., M. D., Cincinnati, Ohio (29).
Heighway, A. E., jr., 86 West 7th St., Cincinnati, Ohio (29).
Heighway, S. C., Cincinnati, Ohio (30).
Heilprin, Prof. Angelo, Acad. Nat. Sciences, Philadelphia, Pa. (33).
Heine, Rev. G. Colborne, 102 St. Famille St., Montreal, Can. (31).
Hemiup, N. H., Pence Opera House, Room 1, Minneapolis, Minn. (31).
Henderson, Miss A. M., Minneapolis, Minn. (32).
Henderson, Chas. Hanford, 201 So. 5th St., Philadelphia, Pa. (33).
Hendricks, Henry H., 512 Fifth Avenue, New York, N. Y. (30).
Hendricks, J. E., Des Moines, Iowa (29).
Henkels, Frank, 138 So. 6th St., Philadelphia, Pa. (33).
Henshaw, Samuel, Boston Soc. Nat. Hist., Boston, Mass. (29).
Hering, Prof. Dan'l W., Westminster, Md. (30).
Hering, Rudolph, 326 Walnut St., Philadelphia, Pa. (33).

- Herman, Joseph E., Acushnet, Bristol Co., Mass. (32).
 Herrick, F. H., Burlington, Vt. (31).
 Hersey, George D., M. D., 261 Broad St., Providence, R. I. (29).
 Hertzberg, Prof. Constantine, 140 Dufield St., Brooklyn, N. Y. (29).
 Hewitt, Charles N., Sec. State Bd. of Health, Red Wing, Minn. (31).
 HEXAMER, C. JOHN, C. E., 2313 Green St., Philadelphia, Pa. (33).
 Heyer, Wm. D., Elizabeth, N. J. (33).
 Hibbard, Miss Sarah E. (31).
 Hickling, Daniel P., 221 Third St., Washington, D. C. (32).
 Hicks, John D., Old Westbury, Queen's Co., L. I. (23).
 Hicks, John S., Roslyn, N. Y. (31).
 Hicks, Prof. Lewis E., State Univ., Lincoln, Neb. (31).
 Higgins, Samuel, Susquehanna, Pa. (33).
 Higginson, John A., 260 Clarendon St., Boston, Mass. (26).
 Hildreth, Dr. John L., 37 Brattle St., Cambridge, Mass. (29).
 Hill, Chas. S., care Dept. of State, Washington, D. C. (33).
 Hills, Joseph L., 157 K St., South Boston, Mass. (31).
 Hinckley, Miss Mary H., Mattapan Station, Milton, Mass. (31).
 Hindley, Prof. R. C., Racine College, Racine, Wis. (33).
 Hinds, Prof. J. I. D., Lebanon, Tenn. (26).
 Hingston, Dr. William H., Montreal, Can. (31).
 Hinton, John H., M. D., 41 West 32nd St., New York, N. Y. (29).
 Hirschfelder, Chas. A., Vice Consul U. S. A., Toronto, Can. (33).
 Hitchcock, Henry, 404 Market St., St. Louis, Mo. (27).
 Hobbs, A. C., Bridgeport, Conn. (28).
 Hockley, Thos., 235 So. 21st St., Philadelphia, Pa. (33).
 Hodge, J. M., Greenup, Greenup Co., Ky. (29).
 Hoeltge, Dr. A., 322 Lime St., Cincinnati, Ohio (30).
 Holabird, Gen. Samuel B., Q. M. Gen. U. S. A., Washington, D. C. (32).
 Holbrook, F. N., E. M., 7 Jefferson St., Brooklyn, N. Y. (26).
 Holbrook, Levi, P. O. Box 536, New York, N. Y. (33).
 Holden, L. E., Cleveland, Ohio (32).
 Holland, John, 19 W. 4th St., Cincinnati, Ohio (30).
 Holley, George W., Ithaca, N. Y. (19).
 Hollick, Arthur, Box 105, New Brighton, Staten Island, N. Y. (31).
 Hollingsworth, Miss Rose, Mattapan Station, Milton, Mass. (31).
 Holly, Jno. I., 62 Beaver St., New York, N. Y. (29).
 Holman, David S., Franklin Inst., Philadelphia, Pa. (33).
 Holman, Mrs. Silas W., Mass. Inst. of Technology, Boston, Mass. (29).
 Holmes, Edw. J., 17 Beacon St., Boston, Mass. (29).
 Holmes, Prof. Jos. A., Chapel Hill, N. C. (33).
 Holstein, Geo. Wolf, Box 34, Belvidere, Warren Co., N. J. (28).
 Holstein, L. M., Belvidere, Warren Co., N. J. (31).
 Holt, Henry, 12 East 23d St., New York, N. Y. (29).
 Holway, E. W. D., Decorah, Iowa (33).
 Holzinger, Prof. John M., Winona, Minn. (32). [(29).
 Homer, Chas. S., jr., of Valentine & Co., 323 Pearl St., New York, N. Y.

- Homes, Henry A., Librarian State Library, Albany, N. Y. (11).
 Homes, Henry F., Albany, N. Y. (31).
 Hood, E. Lyman, Minneapolis, Minn. (30).
 Hood, Gilbert E., Lawrence, Mass. (29).
 Hood, Harvey P., Derry, N. H. (33).
 Hooper, Dr. F. H., 150 County St., New Bedford, Mass. (29).
 Hooper, Wm. Leslie, College Hill, Mass. (33).
 Horr, Asa, M. D., Dubuque, Iowa (21).
 Horton, Rev. Sanford J., D.D., Cheshire, Conn. (28).
 How, W. Storer, Chestnut, S. E. cor. 12th St., Philadelphia, Pa. (30).
 Howe, Allen B., Ph. D., New Haven, Conn. (31).
 Howe, Andrew J., M. D., Cincinnati, Ohio (28).
 Howell, Edw. I. H., 4636 Germantown Ave., Germantown, Pa. (33).
 Howell, Edwin E., Rochester, N. Y. (25).
 Howell, Richard L., Millville, N. J. (32).
 Howland, Edw. P., 211 4½ St., Washington, D. C. (29).
 Hubbard, George W., M. D., Nashville, Tenn. (26).
 Hudson, George H., Plattsburgh, Clinton Co., N. Y. (31).
 Hugo, T. W., Duluth, Minn. (33).
 Huling, Ray G., Fitchburg, Mass. (31).
 Hulst, Rev. Geo. D., 15 Himrod St., Brooklyn, N. Y. (29).
 Humphrey, D., M. D., Lawrence, Mass. (18).
 Humphreys, A. W., Box 1384, New York, N. Y. (20).
 Humphreys, Fred. H., M. D., 109 Fulton St., New York, N. Y. (30).
 Humphreys, Dr. Frederick, 109 Fulton St., New York, N. Y. (29).
 Hungerford, Edward, Burlington, Vt. (31).
 Hunt, Ezra M., M.D., Trenton, N. J. (33).
 Hunt, Miss Sarah E., Salem, Mass. (20).
 Hunt, Mrs. Wm., 1300 Spruce St., Philadelphia, Pa. (33).
 Huntington, Prof. Chester, P. O. Box 1780, New York, N. Y. (26).
 Hurd, E. O., 4 W. 3d St., Cincinnati, Ohio (30).
 Hurlburt, Edw., 128 Genesee St., Utica, N. Y. (33).
 Hutchinson, Charles W., Utica, N. Y. (31).
 Hutchinson, E. S., Newtown, Bucks Co., Pa. (33).
 Hutchinson, Prof. J. C., Monmouth, Warren Co., Ill. (32).
 Hyatt, Jonathan D., Morrisania Station, New York, N. Y. (29).
 Hyatt, Col. Theodore, Pres. Penn. Military Acad., Chester, Pa. (30).

- Iles, George, Windsor Hotel, Montreal, Can. (31).
 Ingham, Wm. A., 320 Walnut St., Philadelphia, Pa. (33).
 Ives, Hubert R., 791 Sherbrooke St., Montreal, Can. (31).

- Jack, John G., Chateaugay Basin, P. Q., Can. (31).
 Jackson, Chas. C., 24 Congress St., Boston, Mass. (29).
 Jackson, Jacob A., Des Moines, Iowa. (33).
 James, Bushrod W., M. D., N. E. cor. 18th and Green Sts., Philadelphia, Pa. (29).

- James, Davis L., 177 Race St., Cincinnati, Ohio (30).
 James, Edmund J., Ph.D., Univ. of Pa., Philadelphia, Pa. (33).
 James, Henry, M. D., City Belleville, Ontario, Can. (29).
 Janney, Reynold, Wilmington, Clinton Co., Ohio (30).
 Jefferis, Wm. W., 1836 Green St., Philadelphia, Pa. (33).
 Jefferson, T. E., Hudson, Wis. (32).
 Jenkins, Edw. H., New Haven, Conn. (33).
 Jenney, Herbert, cor. 5th and Walnut Sts., Cincinnati, Ohio (30).
 Jennings, W. H., Eng. C. H. V. and T. R'way, Columbus, Ohio (33).
 Jerrell, Herbert Parvine, Bridgeton, N. J. (33).
 Jesup, Morris K., 52 William St., New York, N. Y. (29).
 Jewett, Henry S., M. D., 21 S. Ludlow St., Dayton, Ohio (30).
 Johnson, Anna H., M.D., Orange, Essex Co., N. J. (33).
 Johnson, Prof. Hosmer A., Academy of Sciences, Chicago, Ill. (22).
 Johnson, Prof. John B., Washington Univ., St. Louis, Mo. (33).
 Johnson, Lawrence C., Washington, D. C. (33).
 Johnston, Miss Elizabeth B., 937 K St., Washington, D. C. (30).
 Johnston, Sanders W., Counsel at Law, 1427 F St., Washington, D. C. (29).
 Joly, Henri Gustave, Quebec, Can. (32).
 Jones, George W., Ithaca, N. Y. (32).
 Jones, Mrs. Gulielma M. S. P., 1312 Filbert St., Philadelphia, Pa. (33).
 Jones, Joseph, M.D., New Orleans, La. (33).
 Jones, Louis Q., 42 Farmington Ave., Hartford, Conn. (31).
 Jones, Prof. Richard W., Pres. Mississippi Industrial Inst. and Coll., Columbus, Miss. (25).
 Jones, Wm. A., Major Corps of Engrs. U. S. A., Portland, Oregon (29).
 Jordan, Prof. David S., Bloomington, Ind. (31).
 Joseph, J. H., Dorchester St., Montreal, Can. (31).
 Judson, Chas. H., LL.D., Greenville, S. C. (33).
 Julich, Wilhelm (29).
 Justice, Wm. W., Germantown, Pa. (33).
 Justice, Mrs. Wm. W., Germantown, Pa. (33).
 Justus, Irving J., Stanfordville, Dutchess Co., N. Y. (28).
 Keen, Wm. W., M. D., 1729 Chestnut St., Philadelphia, Pa. (29).
 Keller, Harry F., 6th St., below Vine, Philadelphia, Pa. (33).
 Kelley, Clarence E., P. O. Box 1235, Haverhill, Mass. (32).
 Kellogg, David S., M. D., Plattsburgh, N. Y. (29).
 Kellogg, James H., 1 Ida Terrace, Troy, N. Y. (29).
 Kellogg, John H., M. D., Battle Creek, Mich. (24).
 Kelsey, Prof. Ambrose P., Clinton, N. Y. (29).
 Kemper, Dr. And. C., 101 Broadway, Cincinnati, Ohio (30).
 Kennedy, Prof. George T., Kings College, Windsor, N. S. (29).
 Kidder, H. P., 40 State St., Boston, Mass. (29).
 Kilgore, William, Minneapolis, Minn. (32).

- Kimball, Arthur Lalanne, Johns Hopkins Univ., Baltimore, Md. (33).
 Kimball, H. Augusta, M.D., 1110 Walnut St., Philadelphia, Pa. (33).
 Kimball, John Cone, Revere House, Boston, Mass. (30).
 Kinder, Miss Sarah, 27 Lockerbie St., Indianapolis, Ind. (20).
 King, A. F. A., M. D., 726 13th St. N. W., Washington, D. C. (29).
 King, Charles F., Steelton, Pa. (33).
 King, F. H., River Falls, Wis. (32).
 King, Miss Harriet, Salem, Mass. (28).
 King, Hiram U., Stamford, Conn. (31).
 King, Mrs. Mary B. A., 21 Madison St., Rochester, N. Y. (15).
 Kingsley, J. Sterling, Malden, Mass. (33).
 Kinner, Dr. Hugo, 1517 South Seventh St., St. Louis, Mo. (21).
 Kirkland, Thomas, Toronto, Ontario, Can. (31).
 Kirkpatrick, James A., 1138 Girard St., Philadelphia, Pa. (7).
 Kitchell, John W., Pana, Christian Co., Ill. (32).
 Knapp, Prof. Seaman A., Ames, Iowa (32).
 Knight, Prof. Charles M., 245 Carroll St., Akron, Ohio (29).
 Knight, Miss Elizabeth G., 212 E. 50th St., New York, N. Y. (31).
 Knowlton, Frank H., Dept. of Botany, U. S. Nat'l Museum, Washington, D. C. (33).
 Kocsis, Alexander, Livingston, Guatemala (26).
 Kolbe, C. W., Ph. D., 32 Longwood Ave., Cleveland, Ohio (33).
- Lacoe, R. D., Pittston, Pa. (31).
 Laflamme, Prof. J. C. K., Laval Univ., Quebec, Can. (29).
 La Flesche, Francis, Indian Bureau, Interior Dept., Washington, D. C. (33).
 Laist, Otto, Cincinnati, Ohio (30).
 Lakes, Prof. Arthur, State School of Mines, Golden, Col. (26).
 Lamb, Mrs. Martha J., Coleman House, New York, N. Y. (29).
 Lamborn, Robert H., Ph. D., 32 Nassau St., New York, N. Y. (28).
 Landesberg, Maximilian, M. D., 2006 Arch St., Phila., Pa. (33).
 Lane, Jonathan A., Boston, Mass. (29).
 Larkin, Ethan Pendleton, M.D., Alfred Univ., Alfred Centre, N. Y. (33).
 Larkin, Frederick, M. D., Randolph, N. Y. (28).
 Lathrop, J. C., Bridgeport, Conn. (31).
 Latimer, Charles, Chief Eng. N. Y. P. and O. R. R., Cleveland, Ohio (31).
 Latour, Major L. A. Huguet, 36 McGill College Ave., Montreal, Can. (31).
 Laudy, Louis H., School of Mines, Columbia College, New York, N. Y. (28).
 Lawrence, Hon. Edw., Pres't Bunker Hill National Bank, Charlestown, Mass. (18).
 Laws, Miss Annie, 100 Dayton St., Cincinnati, Ohio (30).
 Lawson, George, LL. D., Halifax, N. S. (31).
 Lawson, Prof. Victor F., Chicago, Ill. (32).
 Lea, John McCormick, Nashville, Tenn. (26).
 Learned, Rev. J. C., 1748 Waverly Place, St. Louis, Mo. (27).

- Leavenworth, Francis P., Leander McCormick Observ., University of Virginia, Va. (30).
- Ledyard, L. W., Cazenovia, Madison Co., N. Y. (29).
- Lee, Wm., M. D., 2111 Penna. Avenue, Washington, D. C. (29).
- Leete, James M., M.D., 2912 Washington Avenue, St. Louis, Mo. (27).
- Leffman, Henry, M. D., P. O. Box 791, Philadelphia, Pa. (31).
- Lehman, B. N., Media, Pa. (32).
- Lehman, G. W., Ph. D., 57 So. Gay St., Baltimore, Md. (30).
- Leidy, Mrs. Joseph, 1302 Filbert St., Philadelphia, Pa. (33).
- Leiseuring, Edw. B., Mauch Chunk, Pa. (33).
- Leland, Eugene R., P. O. Box 2364, New York, N. Y. (25).
- Lemp, Wm. J., cor. Cherokee and 2nd Carondelet Ave., St. Louis, Mo. (27).
- Lennon, William H., Brockport, N. Y. (31).
- Lentz, Wm. O., Mauch Chunk, Pa. (33).
- Leonard, Rensselaer, M.D., Mauch Chunk, Pa. (33).
- Leoser, Charles Mc K., 244 W. 39th St., New York, N. Y. (32).
- Letchworth, Josiah, Buffalo, N. Y. (25).
- L'Etoile, Joseph, Dept. of Interior, Quebec, Can. (31).
- Letterman, Geo. W., Allenton, Mo. (27).
- LeVan, Wm. B., 3607 Baring St., Philadelphia, Pa. (33).
- Levy, Louis E., 854 North 8th St., Philadelphia, Pa. (33).
- Lewis, Elias, jr., Brooklyn Bank, Brooklyn, N. Y. (23).
- Lewis, Miss Graceanna, Acad. Nat. Sci., Philadelphia, Pa. (33).
- Lewis, Wm. J., M.D., 30 Gillett St., Hartford, Conn. (33).
- Libbey, Joseph, Georgetown, D. C. (31).
- Libbey, William, jr., Princeton, N. J. (29).
- Liebig, Dr. G. A., 87 Exchange Place, Baltimore, Md. (30).
- Lindsley, Adrian Van S., Sec'y Univ. of Nashville, Nashville, Tenn. (26).
- Linton, Miss Laura, 710 13th Ave. S. E., Minneapolis, Minn. (33).
- Lippincott, J. Dundas, 509 So. Broad St., Philadelphia, Pa. (33).
- Lippincott, Mrs. J. Dundas, 509 So. Broad St., Philadelphia, Pa. (33).
- Little, William, Montreal, Can. (31).
- Livermore, Mrs. M. A. C., 24 North Avenue, Cambridge, Mass. (29).
- Lloyd, Mrs. Rachel, Louisville, Ky. (31).
- Logan, John, M. D., 141 E. 15th St., New York, N. Y. (29).
- Loiseau, Emile F., 303 Walnut St., Philadelphia, Pa. (33).
- Lomb, Carl F., Rochester, N. Y. (29).
- Longshore, Hannah E., M.D., 1326 Arch St., Philadelphia, Pa. (33).
- Loomis, Horatio, Burlington, Vt. (31).
- Loud, Prof. Frank H., Colorado Springs, Col. (29).
- Lounsbury, Prof. Thos. R., New Haven, Conn. (31).
- Lovell, John W., New York, N. Y. (31).
- Lovewell, Prof. Joseph T., Washburn College, Topeka, Kansas (25).
- Low, Seth, 31 Burling Slip, New York, N. Y. (29).

- Lowell, Aug., 60 State St., Boston, Mass. (29).
Lowrie, J. R., Warriorsmark, Pa. (29).
Lucas, Albert, 141 N. 4th St., Philadelphia, Pa. (33).
Lucas, John, 141 N. 4th St., Philadelphia, Pa. (33).
Lucas, Mrs. John, 1913 Arch St., Philadelphia, Pa. (33).
Ludlow, Col. Wm., Water Dept., Philadelphia, Pa. (33).
Lufkin, Albert, Newton, Iowa (31).
Lunn, William, Montreal, Can. (31).
Lyford, Edwin F., Springfield, Mass. (33).
Lyford, Prof. Moses, Waterville, Me. (22).
LYMAN, BENJ. SMITH, Northampton, Mass. (15).
Lyman, Henry H., 74 McTavish St., Montreal, Can. (29).
Lynch, W. H., Danville, P. Q., Can. (31).
Lyons, Joseph, U. S. Patent Office, Washington, D. C. (33).
- Mac Alister, James, 713 Filbert St., Philadelphia, Pa. (33).
MacArthur, Charles L., Troy, N. Y. (19).
MacGregor, Donald, 106 Austin St., Houston, Texas (33).
Mac Laurin, Rev. Donald D., 2114 17th Ave. S., Minneapolis, Minn. (32).
Mac Swain, L. S., Thomasville, Ga. (33).
Mack, William, M.D., Salem, Mass. (21).
Macomber, Albert E., Toledo, Ohio (30).
Macomber, Isaac B., Portsmouth, R. I. (29).
Macy, Arthur, C. E., Silver King, Pinal Co., Arizona Terr. (26).
Maffet, Wm. Ross, Wilkes Barre, Pa. (33).
Maguire, Franck Z., 1116 Virginia Ave., Washington, D. C. (33).
Major, Dr. George W., 1398 St. Catherine St., Montreal, Can. (31).
Makeever, John L., Osceola, Polk Co., Neb. (32).
Mallinckrodt, Edw., P. O. Sub-Station A, St. Louis, Mo. (29).
Maloney, James A., P. O. Box 491, Washington, D. C. (30).
Manning, Richard C., Salem, Mass. (29).
Manning, Richard H., Brooklyn, N. Y. (29).
Mauning, Miss Sara M., Lake City, Minn. (33).
Manning, Warren H., Reading, Mass. (31).
Mansfield, I. F., Cannelton, Beaver Co., Pa. (32).
Mansfield, J. M., Mt. Pleasant, Iowa (25).
Marble, J. Russel, Worcester, Mass. (31).
Marble, Miss Sarah, Woonsocket, R. I. (29).
Marcy, Henry O., M. D., 690 Main St., Cambridge, Mass. (28).
Marler, George L., Montreal, Can. (31).
Marsden, Samuel, 907 Clay Avenue, St. Louis, Mo. (27).
Marshall, William I., Fitchburg, Mass. (27).
Martin, Miss Lillie J., High School, Indianapolis, Ind. (32).
Martindale, Isaac C., Camden, N. J. (26).
Martindale, Mrs. Lizzie J., Camden, N. J. (33).
Mason, Norman N., Providence, R. I. (29).

- Mason, Dr. William P., Troy, N. Y. (31).
 Mathews, Robert, 96 Spring St., Rochester, N. Y. (25).
 Mathieu, Jean Anton, 52 Moffat Block, Detroit, Mich. (33).
 Matlack, Charles, 625 Walnut St., Philadelphia, Pa. (27).
 Matthews, E. O., Capt. U. S. N., U. S. Flagship, "New Hampshire" (1st Rate), Newport, R. I. (28).
 Mattison, Joseph G., 197 Pearl St., New York, N. Y. (30).
 Maury, Rev. Mytton, D. D., Goshen, N. Y. (33).
 Maxwell, Geo. M., Wyoming, Hamilton Co., Ohio (30).
 May, Miss Abby W., 3 Exeter St., Boston, Mass. (29).
 May, Addison, West Chester, Pa. (29).
 May, John J., Box 2348 Boston, Mass. (29).
 Mayer, William G., Cincinnati, Ohio (30).
 Maynard, Geo. W., 35 Broadway, New York, N. Y. (33).
 Maynard, Washburn, Lt. U. S. N., Torpedo Station, Newport, R. I. (33).
 Mays, Dr. Thos. J., Upper Lehigh, Pa. (29).
 McAdams, Wm., jr., Otterville, Ill. (27).
 McCabe, Thomas, Patent Office, Ottawa, Can. (32).
 McCall, Mrs. Geo. A., West Chester, Pa. (33).
 McChesney, Charles E., M. D., U. S. A., Fort Bennett, Dakota Terr. (30).
 McClintock, A. H., Wilkes Barre, Pa. (33).
 McCorkle, Spencer C., Ass't C. and G. Survey, Sub Office, Philadelphia, Pa. (33).
 McCreath, Andrew S., 223 Market St., Harrisburgh, Pa. (33).
 McCutchen, Aug. R., Dept. Agric., Atlanta, Ga. (25).
 McDougall, John Lorn, Ottawa, Ontario, Can. (33).
 McFadden, Prof. L. H., Westerville, Ohio (32).
 McFarland, Robert W., LL.D., Columbus, Ohio (33).
 McGee, Charles K., Ann Arbor, Mich. (32).
 McGee, Miss Emma R., Farley, Iowa (33).
 McGobrick, James, Minneapolis, Minn. (32).
 McGuire, Joseph D., Ellicott City, Md. (30).
 McInnis, Prof. Louis L., College Station, Texas (31).
 McKean, W. V., 151 North 18th St., Philadelphia, Pa. (33).
 McKenna, Chas. Francis, 216 E. 19th St., New York, N. Y. (33).
 McLachlan, J. S., 480 St. Paul St., Montreal, Can. (31).
 McLarty, James M., care Alex. Moore, No. 3 School St., Boston, Mass. (31).
 McLean, T. C., Lieut. U. S. N., Navy Dept., Washington, D.C. (33).
 McLennan, Hugh, Montreal, Can. (31).
 McLeod, Geo. I., 3905 Locust St., Philadelphia, Pa. (33).
 McMaster, Æneus (31).
 McNair, F. V., Commander U. S. N., Naval Academy, Annapolis, Md. (28).
 McNeal, Albert T., Bolivar, Tenn. (26).
 McNeill, Malcolm, Princeton, N. J. (32).
 McPike, Mrs. Jennie, Brazeau P. O., Perry Co., Mo. (33).

- McWhorter, Tyler, Aledo, Ill. (20).
Mead, Walter H., 65 Wall St., New York, N. Y. (29).
Medici, Chas. de, Ph.D., 347 Sixth Ave., New York, N. Y. (33).
Meehan, Mrs. Thos., Germantown, Pa. (29).
Meigs, John, Ph.D., The Hill School, Pottstown, Pa. (33).
Meister, Herman C., 3013 Meramec St., St. Louis, Mo. (33).
Mendenhall, R. J., Minneapolis, Minn. (31).
Merchant, Richard V., East Weymouth, Mass. (29).
Merkel, G. H., M. D., 322 Shawmut Avenue, Boston, Mass. (29).
Merriam, C. Hart, M.D., Locust Grove, Lewis Co., N. Y. (33).
Merrick, Hon. Edwin T., New Orleans, La. (29).
Merriman, Prof. Geo. B., Rutgers College, New Brunswick, N. J. (29).
Merriman, Prof. Mansfield, Lehigh Univ., Bethlehem, Pa. (32).
Merritt, E. G., Indianapolis, Ind. (33).
Merryman, Capt. James H., U. S. R. M., 3 Bowling Green, New York, N. Y. (31).
Merryweather, Geo. N., cor. 6th and Race Sts., Cincinnati, Ohio (30).
Metcalf, Caleb B., Highland Military Academy, Worcester, Mass. (20).
Metcalf, William, Pittsburgh, Pa. (33).
Metz, Charles L., M. D., Madisonville, Hamilton Co., Ohio (30).
Meyer, Charles E., 1717 Chestnut St., Philadelphia, Pa. (33).
Michels, John, Box 3230, New York, N. Y. (29).
Miles, Prof. Manly, Mass. Agric. Coll., Amherst, Mass. (29).
Miller, Dr. Chas. A., Longview Asylum, Carthage, Hamilton Co., Ohio, (30).
Miller, Edgar G., 279 Baltimore St., Baltimore, Md. (29).
Miller, Enoch H., M. D., Liberty, Mo. (32).
Miller, Geo. M., 20 Broad St., New York, N. Y. (29).
Miller, John A., Drawer 110, Cairo, Ill. (22).
Miller, S. A., Cincinnati, Ohio (26).
Mills, Andrew G., Galveston, Texas (33).
Mills, James, M. A., Guelph, Ontario, Can. (31).
Mills, T. Wesley, Montreal, Can. (31).
Mills, William H., Hamilton, Ontario, Can. (31).
Minns, Miss S., 14 Louisberg Square, Boston, Mass. (32).
Mitchell, Geo. O., Hanover, N. H. (29).
Mixter, Calvin S., Census Bureau, Washington, D. C. (31).
Moat, Robert, Montreal, Can. (31).
Mohr, C. A., Mobile, Ala. (30).
Mohr, Charles, Mobile, Ala. (30).
Mohr, Miss Emily, Cincinnati, Ohio (30).
Mohr, Miss Marie, Cincinnati, Ohio (30).
Mohr, Paul, Cincinnati, Ohio (30).
Moliner, Adolfo, 530 Cerro, Havana, Cuba (28).
Molson, John, Montreal, Can. (31).
Molson, John H. R., Montreal, Can. (31).
Montgomery, Henry, 536 Ontario St., Toronto, Can. (29).

- Moody, Mrs. Mary B., M. D., 187 N. Pearl St., Buffalo, N. Y. (25).
 Moore, Alex., 3 School St., Boston, Mass. (29).
 Moore, Alvin H., Magog, P. Q., Can. (31).
 Moore, E. C., care Tiffany & Co., New York, N. Y. (30).
 Moore, Robert, 325 Chestnut St., St. Louis, Mo. (33).
 Morehouse, George W., Wayland, Steuben Co., N. Y. (24).
 Moreland, Prof. S. T., Lexington, Va. (33).
 Morgan, James H., Carlisle, Pa. (33).
 Morgan, Wm. E., Haverford College, Pa. (33).
 Morgan, Wm. F., 1 East 40th St., New York, N. Y. (27).
 Morison, Dr. N. H., Provost of Peabody Institute, Baltimore, Md. (17).
 Morison, Harrison G. O., Minneapolis, Minn. (32).
 Morison, Rebecca N. (32).
 Morris, Gouverneur, Lansford, Pa. (33).
 Morris, Wistar, 209 So. 5th St., Philadelphia, Pa. (33).
 Morse, Charles J., Morse Bridge Co., Youngstown, Ohio (31).
 Morse, H. L., M. D., Park Square, Boston, Mass. (31).
 Morse, Mrs. Mary J., 57 Jackson St., Lawrence, Mass. (29).
 Mortimer, Capt. John H., care of F. Habirshaw, 113 Maiden Lane, New York, N. Y. (31).
 Morton, Miss Anna J., 1800 Michigan Ave., Chicago, Ill. (31).
 Moser, Lieut. Jeff. F., U. S. N., Slatington, Pa. (28).
 Mott, Dr. H. A., 61 Broadway, New York, N. Y. (27).
 Mowry, Wm. A., 16 Hawley St., Boston, Mass. (29).
 Muir, William, 1395 St. Catherine St., Montreal, Can. (31).
 Müller, Herman E., M. D., Oakland, Cal. (32).
 Munn, John P., M. D., 18 West 58th St., New York, N. Y. (31).
 Munro, Rev. A. H., 340 Bleury St., Montreal, Can. (31).
 Murdoch, John, Smithsonian Institution, Washington, D. C. (29).
 Murdock, J. B., Lieut. U. S. N., 24 Alaska St., Roxbury, Mass. (28).
 Murphy, Edward, 405 St. Paul St., Montreal, Can. (31).
 Murphy, Patrick J., Columbia Hospital, Washington, D. C. (30).
 Murray, Rev. Dr. J. Clark, 111 Mackay St., Montreal, Can. (31).
 Murtfeldt, Miss Augusta, Kirkwood, Mo. (29).
 Myers, John A., Agricultural College, Oktibbeha Co., Miss. (30).

 Nachtrieb, Henry F., 15 North St., St. Paul, Minn. (29).
 Nagel, Herman, M.D., 2044 Lafayette Avenue, St. Louis, Mo. (30).
 Nesbit, Thos. Murray, Box 316, Lewisburg, Pa. (33).
 Nesmith, Henry E., jr., 28 South St., New York, N. Y. (30).
 Nettleton, A. B., Minneapolis, Minn. (31).
 Nettleton, Chas., Room 20, 117 Broadway, New York, N. Y. (30).
 Newberry, Prof. Spencer Baird, Ithaca, N. Y. (33).
 Newington, Harry M., 2645 Washington Ave., St. Louis, Mo. (31).
 Newton, Rev. John, Mary Esther, West Fla. (7).
 Nicholas, Geo. Lawrence, Princeton, N. J. (33).
 Nichols, A. B., Reynoldsville, Pa. (33).

- Nichols, H. E., Lieut. Comdr. U. S. N., U. S. S. Pinta, Sitka, Alaska. (29).
- Nicholson, Prof. Hunter, Knoxville, Tenn. (26).
- Nolan, Edw. J., M. D., Acad. of Nat. Sciences, Philadelphia, Pa. (29).
- Norman, Geo. H., C. E., Newport, R. I. (29).
- Noyes, William A., Ph. D., Univ. of Tennessee, Knoxville, Tenn. (32).
- Nunn, R. J., 119 York St., Savannah, Ga. (33).
- Nuttall, L. W., Nuttallburg, Fayette Co., West Va. (29).
- Ober, Frederick A., Beverly, Mass. (31).
- O'Hara, Michael, M.D., 31 South 16th St., Philadelphia, Pa. (33).
- Oliver, Dr. Charles A., 1507 Locust St., Philadelphia, Pa. (33).
- Oliver, Prof. Marshal, U. S. N., Naval Acad., Annapolis, Md. (31).
- Olmsted, Fred. Law, Brookline, Mass. (22).
- Ordway, Mrs. John M., Tulane Univ., New Orleans, La. (29).
- Orm, John, Paducah, McCracken Co., Ky. (27).
- Ormond, Prof. Alexander T., Princeton, N. J. (32).
- Osborn, Francis A., 43 Milk St., Boston, Mass. (29).
- Osborne, Mrs. Ada M., Waterville, Oneida Co., N. Y. (19).
- Osborne, Amos O., Waterville, Oneida Co., N. Y. (19).
- Osgood, Joseph B. F., Salem, Mass. (31).
- Osmond, Prof. I. Thornton, State College, Centre Co., Pa. (33).
- Owen, Frank A., 304 North St., Burlington, Vt. (31).
- Owens, Mary E., 270 W. 7th St., Cincinnati, Ohio (30).
- Owens, Wm., M.D., 270 W. 7th St., Cincinnati, Ohio (33).
- Owens, Wm. G., Lewisburg, Union Co., Pa. (33).
- Paddock, John R., Stevens Institute, Hoboken, N. J. (29).
- Page, Dr. D. L., Lowell, Mass. (33).
- Paine, Charles, 15 Broad St., New York, N. Y. (22).
- Paine, Sidney B., P. O. Box 3311, Boston, Mass. (30).
- Palmer, Miss Alice W., Bellevue St., Roxbury, Mass. (27).
- Palmer, Rev. Benj. M., Box 1628, New Orleans, La. (21).
- Palmer, Dr. Edward, Smithsonian Institution, Washington, D. C. (22).
- Palmer, Miss Mary T., Bellevue St., Roxbury, Mass. (30).
- Pardee, Walter S., Minneapolis, Minn. (32).
- Parsons, Henry B., 72 William St., New York, N. Y. (30).
- Patrick, Dr. J. J. R., Belleville, St. Clair Co., Ill. (27).
- Patterson, Dr. Edw. Mortimer, Fredericton, N. B. (33).
- Paul, Caroline A., M.D., Vineland, Cumberland Co., N. J. (23).
- Paul, Prof. Henry M., U. S. N. Observ., Washington, D. C. (33).
- Peabody, Prof. Cecil H., Mass. Inst. Technology, Boston, Mass. (32).
- Peabody, Prof. S. H., Regent Illinois Industrial Univ., Champaign, Ill. (30).
- Pearson, Rev. Arthur H., Northfield, Minn. (32).
- Pease, Rufus D., M. D., 1331 Ridge Ave., Philadelphia, Pa. (33).
- Peck, Mrs. John H., 3 Irving Place, Troy, N. Y. (28).

- Peck, W. A., C. E., Surveyor General's Office, Denver, Col. (19).
 Pedrick, Mrs. Wm. R., Lawrence, Mass. (33).
 Peet, Emerson W. (32).
 Peffer, George P., Pewaukee, Wis. (32).
 Peirce, Benj. O., jr., Beverly, Mass. (29).
 Peirce, Prof. C. S., Johns Hopkins Univ., Baltimore, Md. (30).
 Peirce, Cyrus N., D.D.S., 1415 Walnut St., Philadelphia, Pa. (31).
 Peirce, Harold, Joshua Peirce and Co., Bristol, Pa. (33).
 Pennock, Edw., 805 Franklin St., Philadelphia, Pa. (29).
 Percy, H. C., P. O. Box 173, Norfolk, Va. (32).
 PERKINS, ARTHUR, 49 Woodland St., Hartford, Conn. (31).
 Perkins, Prof. Herbert B., Appleton, Wis. (32).
 Perrine, Fred. A. C., A. B., Freehold, N. J. (33).
 Perry, Hon. Aaron F., Cincinnati, Ohio (30).
 Peter, Alfred M., Lexington, Ky. (29).
 Peters, Edw. T., P. O. Box 265, Washington, D. C. (33).
 Peters, Judge Thos. M., Moulton, Ala. (29).
 Pettee, Prof. C. H., Hanover, N. H. (31).
 Phelps, A. M., M. D., Chateaugay, N. Y. (31).
 Phelps, George, Nashua, N. H. (31).
 Philbrick, Edw. S., Brookline, Mass. (29).
 Phillips, Henry, jr., 320 South 11th St., Philadelphia, Pa. (32).
 Pickering, T. R., Portland, Me. (33).
 Pickett, Dr. Thos. E., Maysville, Mason Co., Ky. (25).
 Pierce, Willard I., M. E., 104 W. 129th St., New York, N. Y. (33).
 Pignolet, Louis H., 104 Famille St., Montreal, Can. (31).
 Pike, J. W., Vineland, N. J. (29).
 Pike, W. A., Univ. of Minn., Minneapolis, Minn. (29).
 Pillsbury, J. E., Lieut. U. S. N., Commanding Coast Survey Steamer
 Blake, care Coast Survey Office, Washington, D. C. (33).
 Pillsbury, Prof. John H., Smith College, Northampton, Mass. (23).
 PIM, ADMIRAL BEDFORD, Leaside Upper Norwood, London, S. E., Eng.
 (33).
 Pinkerton, T. H., M.D., Oakland, Alameda Co., Cal. (27).
 Pirz, Anthony, Long Island City, N. Y. (29).
 Pitman, Chas. B., Somerville, Mass. (29).
 Pitt, Prof. William H., 138 College St., Buffalo, N. Y. (25).
 Place, Edwin, Cincinnati, N. Y. (33).
 Platt, W. G., 615 Walnut St., Philadelphia, Pa. (32).
 Pope, Frank L., Elizabeth, N. J. (33).
 Porteous, John, 26 Prince Arthur St., Montreal, Canada (22).
 Porter, Edward D., State Univ., Minneapolis, Minn. (32).
 Porter, Thos. C., LL.D., Lafayette College, Easton, Pa. (33).
 Potter, Rev. Henry C., 804 Broadway, New York, N. Y. (29).
 Potter, Jotham, 104 Euclid Ave., Cleveland, Ohio (33).
 Power, Prof. Frederick B., Univ. of Wis., Madison, Wis. (31).
 Prang, Louis, 45 Centre St., Roxbury, Mass. (29).

- Pray, Thomas, Jr., P. O. Box 2519, New York, N. Y. (33).
 Prescott, Wm. I., 264 Race St., Cincinnati, Ohio (30).
 Price, Eli Kirk, jr., 709 Walnut St., Philadelphia, Pa. (33).
 Price, J. Sergeant, 709 Walnut St., Philadelphia, Pa. (33).
 Prince, Gen. Henry, U. S. A., Eastport, Me. (22).
 Prosser, Chas. Smith, B. S., Cornell Univ., Ithaca, N. Y. (33).
 Prosser, Col. Wm. F., Prosser, Yakima Co., Washington Terr. (26).
 Proudfoot, Alex., M. D., 2 Phillips Place, Montreal, Can. (31).
 Prun, John V. L., jr., Albany, N. Y. (29).
 Pulsifer, Mrs. C. Boardman, St. Louis, Mo. (33).
 Purinton, Prof. D. B., Morgantown, W. Va. (31).
 Purinton, Prof. George D., Greenville, S. C. (31).
 Putnam, Chas. P., M. D., 63 Marlborough St., Boston, Mass. (28).
 Putnam, Mrs. M. L. D., Davenport, Iowa (32).
- Rains, Geo. W., M. D., LL. D., Augusta, Ga. (29).
 Rand, C. F., M.D., Batavia, N. Y. (27).
 Randolph, A. F., Fredericton, N. B. (29).
 Randolph, L. S., Susquehanna Depot, Pa. (33).
 Raser, J. Heyl, 42 W. Johnson St., Germantown, Pa. (33).
 Rasin, R. W., Box 715, Baltimore, Md. (30).
 Rau, Eugene A., Bethlehem, Pa. (33).
 Rauch, Chas., 2414 Cecile St., St. Louis, Mo. (33).
 Reading, Edgar, M. D., 3750 Langley Ave., Chicago, Ill. (32).
 Redway, Prof. J. W., Washington Heights, Station M, N. Y. (33).
 Reed, Edwin, 178 Devonshire St., Boston, Mass. (29).
 Reed, Mrs. Ellen B., So. Div. High School, Chicago, Ill. (32).
 Remington, Joseph Price, 1233 Walnut St., Philadelphia, Pa. (33).
 Renninger, John S., M. D., Marshall, Minn. (31).
 Reyburn, Robert, M.D., 2129 F St., N. W., Washington, D. C. (33).
 Reynolds, Sheldon, Wilkes Barre, Pa. (33).
 Rice, Herbert S., Lawrence, Mass. (32).
 Rich, Jacob Monroe, 50 W. 38th St., New York, N. Y. (33).
 Richards, Prof. Charles B., 43 Elm St., New Haven, Conn. (33).
 Richards, Edgar, Dep't of Agric., Washington, D. C. (31).
 Richardson, Tobias G., M. D., Tulane Univ., New Orleans, La. (30).
 Ricketts, Prof. Palmer C., Rensselaer Polytechnic Inst., Troy, N. Y. (33).
 Ricketts, Col. R. Bruce, Wilkes Barre, Pa. (33).
 Rideout, Bates S., Bristol, Conn. (31).
 Ridler, C. E., Box 245, cor. Berkeley and Boylston Sts., under Hotel Berkeley, Boston, Mass. (29).
 Ries, Elias E., 145 So. Broadway, Baltimore, Md. (33).
 Riggs, Geo. W., 115 West 47th St., New York, N. Y. (26).
 Riley, Lewis A., Ashland, Pa. (33).
 Riley, Mrs. Susan, Mobile, Ala. (31).
 Ringueberg, Eugene N. S., Lockport, N. Y. (33).

- Ripley, George C., Minneapolis, Minn. (32).
 Ripley, Mrs. George C., Minneapolis, Minn. (32).
 RIVERA, JOSÉ DE, Inwood-on-the-Hudson, New York, N. Y. (29).
 Robbins, E. P., Room 12, Apollo Building, N. W. cor. Walnut and Fifth
 Sts., Cincinnati, Ohio (30).
 Robbins, Miss Ida F., Arlington, Mass. (31).
 Roberts, Prof. Isaac P., Ithaca, N. Y. (33).
 Roberts, Prof. Milton Josiah, 105 Madison Ave., New York, N. Y. (33).
 Roberts, Thos., Riverton, Burlington Co., N. J. (33).
 Roberts, Thomas S., 27 North 8th St., Minneapolis, Minn. (31).
 Robertson, Andrew, Montreal, Can. (31).
 Robertson, Col. D. A., St. Paul, Minn. (32).
 ROBERTSON, THOMAS D., Rockford, Ill. (10).
 Robeson, Henry B., care Mills, Robeson & Smith, 34 Wall St., New York,
 N. Y. (29).
 Robins, Sampson P., LL. D., Hochelaga, P. Q., Can. (31).
 Robinson, Prof. Franklin C., Brunswick, Me. (29).
 Robinson, Prof. Otis Hall, 273 Alexander St., Rochester, N. Y. (23).
 Robinson, Prof. Thomas, Howard Univ., Washington, D. C. (33).
 Robson, Miss Kate, 186 East Michigan St., Indianapolis, Ind. (32).
 Roeder, Prof. F. A., Ohio Medical College, Cincinnati, Ohio (30).
 Rogers, Dr. H. Raymond, Dunkirk, N. Y. (30).
 Rolfe, Charles W., Champaign, Ill. (32).
 Roosevelt, Hon. Robert B., 17 Nassau St., New York, N. Y. (33).
 Roots, G. Y., N. W. cor. 4th and Walnut Sts., Cincinnati, Ohio (30).
 Ross, M. D., Boston, Mass. (29).
 Rothrock, Prof. Jos. T., West Chester, Pa. (33).
 Rowell, Chas. E., M. D., Stamford, Conn. (33).
 Roy, Rev. James, Cobourg, Ont., Can. (31).
 Rumsey, Bronson C., 58 & 60 Exchange St., Buffalo, N. Y. (15).
 Russell, Champion B., Millbrook Ranch, Laramie City, Wyo. Terr. (33).
 Russell, Henry C., 732 N. 42nd St., W. Philadelphia, Pa. (33).
 Russell, Dr. Linus E., Springfield, Ohio (30).
 Russell, W. H. H., 206 Broadway, New York, N. Y. (24).
 Rust, Horatio N., South Pasadena, Los Angeles Co., Cal. (26).
 Ryder, John A., Box 74, Smithsonian Institution, Washington, D. C. (33).
 Sabin, Prof. Alvah H., 457 Main St., Burlington, Vt. (31).
 Sabine, Annie W., Columbus, Ohio (33).
 Safford, Charles W., Rutland, Vt. (26).
 Safford, Dr. Mary J., 308 Columbus Ave., Boston, Mass. (31).
 Sage, John H., Portland, Conn. (23).
 Salmon, Daniel E., Dep't of Agric., Washington, D. C. (31). [(31).
 Sanborn, Prof. Jeremiah Wilson, Missouri Agric. Coll., Columbia, Mo.
 Sanborn, Rev. John W., Batavia, N. Y. (33).
 Sander, Dr. Enno, St. Louis, Mo. (27).
 Sands, Ferdinand, care Oakes Mfg Co., Steinway, Queens Co., L. I. (33).

- Saville, James H., 342 D St., N. W., Washington, D. C. (29).
 Sayre, Robert H., Bethlehem, Pa. (28).
 Scammon, J. Young, Chicago, Ill. (17).
 SCHAFFER, CHAS., M. D., 1309 Arch St., Philadelphia, Pa. (29).
 Schaffranck, Dr. A., Box 424, Wheeling, W. Va. (27).
 Scharar, Christian H., 2073 North Main Ave., Scranton, Pa. (33).
 Schaub, Julius W., St. Louis, Mo. (27).
 Schmid, Dr. H. Ernest, White Plains, N. Y. (25).
 Schmidt, Dr. H. D., 263½ Canal St., New Orleans, La. (29).
 Schober, Frederick 478 N. 5th St., Philadelphia, Pa. (33).
 Schöney, Dr. L., 672 Lexington Ave., New York, N. Y. (29).
 Schram, Nicholas H., Newburgh, N. Y. (33).
 Schultz, Carl H., 860 Broadway, New York, N. Y. (29).
 Schultze, Edwin A., P. O. Box 56, New York, N. Y. (33).
 Schwarz, E. A., U. S. Dept. of Agric., Washington, D. C. (29).
 Scofield, W. H., Cannon River Falls, Goodhue Co., Minn. (32).
 Scott, Andrew J., M. D., Loudonville, Ohio (32).
 Scott, Aug. E., Lexington, Mass. (29).
 Scott, Chas. B., 907 Walnut St., Philadelphia, Pa. (33).
 Scott, John B., 1520 Arch St., Philadelphia, Pa. (33).
 Scott, Miss L. Content, Loudonville, Ohio (32).
 Scott, Martin P., M. D., Blacksburg, Va. (31).
 Scott, Prof. Wm. B., Princeton, N. J. (33).
 Scoville, S. S., M.D., Lebanon, Ohio (30).
 Scribner, Edward E., St. Paul, Minn. (32).
 Scribner, the Hon. G. Hilton, Youkers, N. Y. (30).
 Scudder, John M., M. D., Cincinnati, Ohio (30).
 Seagrave, Frank E., Providence, R. I. (28).
 Seaman, L. L., M.D., Chief of Staff, Charity Hospital, Blackwell's Island,
 New York, N. Y. (33).
 Sedgwick, Prof. Wm. T., Mass. Inst. of Technology, Boston, Mass.
 (33).
 Seeley, Chas. A., 714 Lexington Ave., New York, N. Y. (18).
 Senecal, L. A., 17 Place d'Armes Square, Montreal, Can. (31).
 Sennett, George B., Meadville, Pa. (31).
 Sewall, Hannah R., 481 Carroll St., St. Paul, Minn. (32).
 Sewall, Susan W., 481 Carroll St., St. Paul, Minn. (32).
 Seymour, Prof. William P., 105 Third St., Troy, N. Y. (19).
 Seyms, George H., 181 Collins St., Hartford, Conn. (31).
 Shackelford, Mrs. Elizabeth P., Saratoga Springs, N. Y. (28).
 Shackelford, G. R. P., Saratoga Springs, N. Y. (29).
 Shackelford, Rev. J. W., 111 E. 82nd St., New York, N. Y. (29).
 Shakespeare, E. O., M.D., 1336 Spruce St., Philadelphia, Pa. (33).
 Share, William W., 336 Navy St., Brooklyn, N. Y. (31).
 Sharp, Prof. Benj., Acad. Nat. Sciences, Philadelphia, Pa. (33).
 Sharpless, Prof. Isaac, Haverford College, Pa. (33).
 SHEAFER, A. W., Pottsville, Pa. (28).

- Sheaffer, Walter S., Pottsville, Pa. (25).
 Shearer, James, Montreal, Can. (31).
 Shearer, John S., Montreal, Can. (31).
 Shelton, Prof. Edward M., Manhattan, Kansas (32).
 Shepard, Rev. Morrill A., Lebanon, St. Clair Co., Ill. (30).
 Shepard, William A., Saratoga Springs, N. Y. (28).
 Shepherd, F. A., 25 North Vine Street, Nashville, Tenn. (26).
 Sheppard, Sam'l A. D., Boston, Mass. (29).
 Sherman, Prof. F. A., Hanover, N. H. (29).
 Sherman, Lewis, M. D., 171 Wisconsin St., Milwaukee, Wis. (30).
 Shiverick, Asa F., Woods Holl, Mass. (33).
 Short, Sidney H., Denver, Col. (28).
 Shultz, Charles S., Hoboken, N. J. (31).
 Sibbald, The Rev. E. W., Belleville, Ont., Can. (33).
 Silliman, Wyllis A., Clarkson, N. Y. (31).
 Silver, Wm. J., P. O. Box 546, Salt Lake City, Utah Terr. (33).
 Simon, Dr. Wm., 10 Block St., Baltimore, Md. (29).
 Simonds, Prof. Frederic W., San José, Cal. (25).
 Simpson, E., Commodore U. S. N., U. S. Navy Yard, League Island, Pa. (28).
 Skinner, George, Kalida, Putnam Co., Ohio (33).
 Slade, Elisha, Somerset, Mass. (29).
 Smead, Miss Marian M., Batavia, N. Y. (31).
 Smedley, Sam'l L., Chief Eng., City Hall, Philadelphia, Pa. (33).
 Smith, Benj. G., Cambridge, Mass. (29).
 Smith, Prof. C. Alfred, Hulton, Allegheny Co., Pa. (30).
 Smith, Charles H., New Haven, N. Y. (33).
 Smith, Prof. Charles J., Cleveland, Ohio (32).
 Smith, Prof. Edgar F., Springfield, Ohio (33).
 Smith, Miss Ellen E., Lake Erie Seminary, Painesville, Ohio (32).
 Smith, Dr. H. A., 286 Race St., Cincinnati, Ohio (30).
 Smith, Henry L., 149 Broadway, New York, N. Y. (26).
 Smith, Mrs. Henry L., 149 Broadway, New York, N. Y. (26).
 Smith, Henry T., Buffalo, N. Y. (25).
 Smith, Herbert E., M. D., Professor of Chem., Med. Dep't, Yale College, New Haven, Conn. (31).
 Smith, Prof. Herbert S. S., College of New Jersey, Princeton, N. J. (29).
 Smith, Herbert W., Academy of Sciences, Box 2621, St. Paul, Minn. (26).
 Smith, Mrs. J. Lawrence, Louisville, Ky. (26).
 Smith, Miss Jennie, Peabody Mus., Cambridge, Mass. (29).
 Smith, John B., 290 3d Ave., Brooklyn, N. Y. (32).
 Smith, Lyndon A., Washington, D. C. (33).
 Smith, Oberlin, Bridgeton, N. J. (33).
 Smith, Prof. Thomas A., Beloit, Wis. (33).
 Smith, Prof. Thomas B., Glasgow, Mo. (30).

- Smith, Thomas H., 161 La Salle St., Chicago, Ill. (31).
 Smith, Uselma C., 707 Walnut St., Philadelphia, Pa. (33).
 Smucker, Isaac, Newark, Ohio (29).
 Smyth, Prof. Jas. D., Burlington, Iowa (28).
 Snelling, Geo. H., Hotel Berkeley, Boston, Mass. (29).
 Snyder, Miss Elizabeth, 2002 Columbia Ave., Philadelphia, Pa. (33).
 Snyder, Henry, jr., Institute for the Blind, Columbus, Ohio (30).
 Soley, John C., Lieut. U. S. N., Navy Dept., Washington, D. C. (29).
 Solomons, Miss Augusta I., Sumter, S. C. (31).
 Solomons, Miss Kate C., Sumter, S. C. (31).
 Solomons, Miss Maude C., Sumter, S. C. (31).
 Soule, R. H., Frankfort, N. Y. (33).
 Soule, Wm., Ph.D., Mount Union, Ohio (33).
 Spafford, F. A., M. D., Flandrean, Moody Co., Dakota Terr. (29).
 Speck, Hon. Charles, St. Louis, Mo. (27).
 Speir, Francis, jr., South Orange, N. J. (29).
 Spence, Mrs. E. Jane, Springfield, Ohio (30).
 Spencer, Geo. S., St. Cloud, Minn. (32).
 Sperry, Chas., Westbrook, Conn. (33).
 Sperry, Prof. Lyman B., Northfield, Minn. (32).
 Spilsbury, E. Gybbon, Pelham Manor, West Chester Co., N. Y. (33).
 SPRAGUE, C. H., Malden, Mass. (29).
 Sprague, Chas. J., Globe Nat. Bank, Boston, Mass. (29).
 Sprague, Frank J., care of Thos. A. Edison, No. 65 Fifth Ave., New York, N. Y. (29).
 Stæbner, Fred W., Westfield, Mass. (28).
 Stam, Colin F., Chestertown, Md. (33).
 Starr, Charles S., M. D., Rochester, N. Y. (31).
 Stearns, Silas, Assistant U. S. Fish Commission, Pensacola, Fla. (28).
 Stearns, Winfrid Alden, Amherst, Mass. (23).
 Stebbins, James H., jr., 119 Pearl St., New York, N. Y. (31).
 Steele, Joel Dorman, The Gables, Elmira, N. Y. (33).
 Stern, David, care B. Stern, Cincinnati, Ohio (30).
 Stevens, Mrs. Elizabeth R., Lowell, Mass. (32).
 Stevens, Geo. T., M. D., 33 West 33d St., New York, N. Y. (28).
 Stevens, R. P., 207 Atlantic Ave., Brooklyn, N. Y. (18).
 Stevenson, Mrs. Cornelius, Chestnut Hill, Philadelphia, Pa. (33).
 Stevenson, James, Ass't Ethnologist, Washington, D. C. (29).
 Stevenson, W. G., M. D., Poughkeepsie, N. Y. (28).
 Stillman, W. O., M. D., 86 South Swan St., Albany, N. Y. (28).
 Stillwell, Charles M., Box 1261, New York, N. Y. (30).
 Stimpson, Thomas M., Peabody, Mass. (18).
 Stimson, E. R., Toronto, Ontario (31).
 Stockbridge, Horace E., Amherst, Mass. (31).
 Stockbridge, Levi, Amherst, Mass. (31).
 Stone, Mrs. Alfred, Providence, R. I. (31).
 Stone, Henry, cor. Broadway and N St., South Boston, Mass. (31).

- Stone, Rev. James A. B., Detroit, Mich. (31).
 Stone, Leander, 3352 Indiana Ave., Chicago, Ill. (32).
 Stone, Lincoln R., M. D., Newton, Mass. (31).
 Stone, Miss Mary H., Salem, Mass. (25).
 Stone, Winthrop E., B.S., Amherst, Mass. (33).
 Storer, Dr. D. H., Boston, Mass. (1).
 Stowell, John, 48 Main St., Charlestown, Mass. (21).
 Stowell, Prof. T. B., Cortland, N. Y. (28).
 Strieby, Prof. William, Colorado Springs, Col. (31).
 Stringham, Prof. Irving, Univ. of Cal., Berkeley, Cal. (33).
 Studer, Jacob H., Tribune Building, New York, N. Y. (31).
 Sullivan, J. A., Malden, Mass. (27).
 Sullivan, James F., 1800 Spring Garden St., Philadelphia, Pa. (33).
 Swartz, James S., 234 So. 4th St., Philadelphia, Pa. (33).
 Swasey, Oscar F., M.D., Beverly, Mass. (17).
 Sweeny, Dr. R. O., St. Paul, Minn. (32).
 Tatum, Jos. T., 221 Chestnut St., St. Louis, Mo. (27).
 Taylor, Franklin, Philadelphia, Pa. (33).
 Taylor, Frederick W., Smithsonian Institution, Washington, D. C. (31).
 Taylor, G. Morrison, 233 So. 4th St., Philadelphia, Pa. (33).
 Taylor, Comdr. H. C., U. S. N., Poughkeepsie, N. Y. (30).
 Taylor, Prof. Jas. M., Hamilton, Madison Co., N. Y. (33).
 Taylor, Thos., M. D., Dept. of Agric., Washington, D. C. (29).
 Taylor, William, 912 New York Ave., Washington, D. C. (33).
 Tepper, Fred., Box 3331, New York, N. Y. (29).
 Terry, James. American Museum Natural History, Central Park (77th St. and 8th Ave.), New York, N. Y. (23).
 Theobald, Albert G. R., Forest Dept., Anamalai, Coimbatore District, India (27).
 Thomas, F. Wolferstan, Montreal, Can. (31).
 Thomas, N. Wiley, Ph. D., 1513 Centennial Ave., Philadelphia, Pa. (33).
 Thompson, Alton Howard, 237 Kansas Ave., Topeka, Kan. (33).
 Thompson, Prof. Chas. O., Terre Haute, Ind. (29).
 Thompson, Daniel G., 29 William St., New York, N. Y. (29).
 Thompson, Mrs. Frank, Merion Station, Penn. R. R., Pa. (33).
 Thompson, Harvey M., 638 West Lake St., Chicago, Ill. (17).
 Thompson, J. E., Spalding, Mich. (31).
 Thompson, Miss Marie N., 323 Elm St., Cincinnati, Ohio (30).
 Thompson, S. A., Minneapolis, Minn. (32).
 Thompson, W. W., care Jeffras Seely & Co., Cincinnati, Ohio (30).
 Thomson, Prof. A., Ames, Iowa (21).
 Thomson, Prof. Henry R., Crawfordsville, Ind. (30).
 Thomson, Wm., M. D., 1426 Walnut St., Philadelphia, Pa. (33).
 Thorburn, John, LL. D., Ottawa, Ont., Can. (29).
 Thornton, Prof. Wm. M., Univ. of Va., Va. (33).
 Thurber, Miss Elizabeth, Plymouth, Mass. (22).

- Tiffany, Asa S., 901 West 5th St., Davenport, Scott Co., Iowa (27).
Tiffin, Mrs. Joseph, jr., cor. Sherbrooke and University Sts., Montreal, Can. (31).
Tileman, J. N., Sandy, Utah Terr. (33).
Timby, Theo. R., Nyack, N. Y. (29).
Tittmann, Otto H., U.S. Coast and Geodetic Survey Office, Washington, D. C. (24).
Todd, Albert, St. Louis, Mo. (27).
Todd, Andrew J., 261 Broadway, New York, N. Y. (29).
Todd, Prof. James E., Tabor, Fremont Co., Iowa (22).
Tolman, James P., West Newton, Mass. (29).
Tomlinson, Dr. J. M., 28½ East Ohio St., Indianapolis, Ind. (20).
Torrey, Herbert G., U. S. Assay Office, 30 Wall St., New York, N. Y. (31).
Towne, Henry R., Pres. Yale and Towne M'fg Co., Stamford, Conn. (33).
Townsend, David, 1723 Wallace St., Philadelphia, Pa. (33).
Townsend, Mrs. David, 1723 Wallace St., Philadelphia, Pa. (33).
Townsend, Franklin, 4 Elk St., Albany, N. Y. (4).
Townsend, Henry C., 709 Walnut St., Philadelphia, Pa. (33).
Townsend, Joseph, Durham, Ontario, Can. (31).
Tracy, Will W., Detroit, Mich. (30).
Treadwell, Geo. A., Phoenix, Arizona (29).
Treat, Erastus B., Publisher and Bookseller, 771 Broadway, New York, N. Y. (29).
Treat, Mrs. Mary, Vineland, N. J. (33).
Triplett, Wm. H., M. D., 116 W. 44th St., New York, N. Y. (28).
Trippe, T. Martin, C. E., Howardsville, San Juan Co., Col. (29).
Troop, James, Agricultural College, Lansing, Mich. (31).
Trottier, A. A., Montreal, Can. (31).
Trowbridge, Mrs. L. H., 266 Woodward Ave., Detroit, Mich. (21).
Trowbridge, Luther H., 266 Woodward Ave., Detroit, Mich. (29).
Tucker, Willis G., M. D., Albany Medical Coll., Albany, N. Y. (29).
Tyler, Edward R., Washington, D. C. (31).
Tyler, John M., Amherst, Mass. (29).

Underwood, Prof. Lucien M., 214 East Genesee St., Syracuse, N. Y. (33).

Vail, Prof. Hugh D., Santa Barbara, Cal. (18).
Valentine, Benj. B., Richmond, Va. (33).
Valentine, Edw. P., Richmond, Va. (33).
Valentine, Ferdinand C., M. D., 30 West 11th St., New York, N. Y. (31).
Vallandigham, James L., LL.D., Newark, Del. (33).
Van Brunt, C., P. O. Box 1119, New York, N. Y. (28).
Vasey, George, M. D., Dept. of Agric., Washington, D. C. (32).
Vaux, Geo., jr., 1715 Arch St., Philadelphia, Pa. (33).
Vermyné, J. J. B., M. D., 98 Spring St., New Bedford, Mass. (29).
Very, Samuel W., Lieut. U. S. N., Warehouse Point, Conn. (28).

- Viele, Gen. Egbert L., Riverside Ave. and 88th St., New York, N. Y. (33).
Vieth, William, cor. 8th and Freeman Sts., Cincinnati, O. (28).
Vining, Edward P., Omaha, Neb. (32).
Vodges, A. W., 1st Lt. 5th Art'y U. S. A., The Military Service Institution, Governor's Island, N. Y. (32).
Volney, C. W., Ph. D., 52 Wall St., New York, N. Y. (31).
Voorhees, Chas. H., M. D., P. O. Lock Box 120, New Brunswick, N. J. (29).
Vredenburg, Edw. H., Rochester, N. Y. (29).
Vultë, Hermann T., Ph. B., School of Mines, Columbia College, New York, N. Y. (30).

Wagner, Ferd., 41 W. 5th St., Cincinnati, Ohio (30).
Wakeman, Thaddeus B., 93 Nassau St., New York, N. Y. (25).
Waldstein, Martin E., Ph. D., 44 Trinity Place, New York, N. Y. (32).
Walker, Dr. G. S., St. Louis, Mo. (27).
Walker, George C., 124 La Salle St., Chicago, Ill. (17).
Walker, Philip, Dept. of Agric., Washington, D. C. (33).
Wall, John L., 338 Sixth Avenue, New York, N. Y. (27).
Wallis, John M., C. E. (32).
Walter, Robert, M. D., Walter's Park P. O., Wernersville, Pa. (33).
Walton, Jos. J. (29).
Walworth, Rev. Clarence A., Albany, N. Y. (28).
Wanamaker, John, 1336 Walnut St., Philadelphia, Pa. (33).
Wanless, John, M. D., 88 Union Ave., Montreal, Can. (31).
Ward, J. Langdon, 120 Broadway, New York, N. Y. (29).
Ward, Samuel B., M. D., Albany, N. Y. (29).
Wardwell, George J., Rutland, Vt. (20).
Waring, Col. George E., jr., Newport, R. I. (29).
Waring, John, Ovid, N. Y. (33).
Warnecke, Prof. Carl, 157 St. Constant St., Montreal, Can. (31).
Warner, Hulbert H., Rochester, N. Y. (31).
Warner, Mrs. J. D., 199 Baltic St., Brooklyn, N. Y. (21).
Warner, John De Witt, 52 William St., New York, N. Y. (33).
Warner, Worcester R., E. Prospect St., Cleveland, Ohio (33).
Warnock, James, 93 Reade St., New York, N. Y. (29).
Warren, Chas., M. D., 1208 N St., N. W., Washington, D. C. (31).
Warren, Joseph W., M. D., 107 Boylston St., Boston, Mass. (31).
Warren, Samuel D., 220 Devonshire St., Boston, Mass. (29).
Warren, Mrs. Samuel D., 67 Mt. Vernon St., Boston, Mass. (29).
Warren, Wm. J., Minneapolis, Minn. (30).
Washburn, John H., Bridgewater, Mass. (31).
Waterhouse, Ai, M. D., Jamestown, N. Y. (29).
Waters, Edwin F., Newton Centre, Mass. (29).
WATERS, GEO. F., 8 Beacon St., Boston, Mass. (29).
Waters, Jabez M., 9th and Freeman Sts., Cincinnati, Ohio (30).
Watson, Miss C. A., Salem, Mass. (31).

- Watt, David A. P., Montreal, Can. (31).
Weaver, Lemuel, Urbana, Ohio (32).
Webb, Miss Sarah E., Elizabeth, N. J. (33).
Weed, Walter H., 6 Pine St., New York, N. Y. (31).
Weeden, Hon. Joseph E., Randolph, N. Y. (31).
Weitbrecht, George, 469 North St., St. Paul, Minn. (32).
Weld, Mrs. Amy T., 119 East 23rd St., New York, N. Y. (28).
Wells, Mrs. C. F., 753 Broadway, New York, N. Y. (31).
Wells, Rev. Martin L., Aurora, Ind. (30).
Wells, Samuel, 31 Pemberton Square, Boston, Mass. (24).
Welsh, John, 304 Walnut St., Philadelphia, Pa. (33).
Wendell, Oliver C., Observatory, Cambridge, Mass. (29).
Wendte, Rev. C. W., Newport, R. I. (29).
West, Arthur W., Salem, Mass. (31).
West, E. P., State Univ., Lawrence, Kan. (33).
Westbrook, Benj. F., M.D., 174 Clinton St., Brooklyn, N. Y. (33).
Weston, Edward, 107 Orange St., Newark, N. J. (33).
Wetherill, Miss J. J. (33).
Wheeler, Herbert A., Washington Univ., St. Louis, Mo. (33).
Wheeler, T. B., M. D., 714 Craig St., Montreal, Canada (11).
Wheildon, Miss Alice W., Concord, Mass. (31).
Whelen, Edw. S., Torrissdale P. O., Philadelphia, Pa. (33).
Whetstone, John L., N. W. cor. 8th St., and Eggleston Avenue, Cincinnati, Ohio (30).
Whitaker, Prof. Channing, Box 524, Lowell, Mass. (29).
Whitall, Henry, 1019 No. 3d St., Camden, N. J. (33).
White, Prof. Charles Joyce, Cambridge, Mass. (29).
White, Ernest William, 1634 So. Juniper St., Philadelphia, Pa. (33).
White, Miss Florence, Mills Seminary, Alameda Co., Cal. (29).
White, Prof. H. C., Univ. of Georgia, Athens, Ga. (29).
White, James W., M.D., Chestnut, S. E. cor. 12th St., Philadelphia, Pa. (33).
White, LeRoy S., Box 157, Waterbury, Conn. (23).
Whiteaves, J. F., Geological Survey, Ottawa, Can. (31).
Whitehouse, F. Cope, Brevoort House, New York, N. Y. (31).
Whiting, S. B., Pottsville, Pa. (33).
Whitman, Edmund B., 36 Trowbridge St., Cambridge, Mass. (29).
Whitman, Prof. Frank P., Rensselaer Polytechnic Inst., Troy, N. Y. (33).
Whitman, Gilbert P., Manchester, N. H. (30).
Wicksteed, Richard John, LL. D., House of Commons, Ottawa, Province of Ont., Can. (29).
Wichmann, F. G., School of Mines, Columbia College, New York, N. Y. (30).
Wilber, Francis A., Rutgers College, New Brunswick, N. J. (31).
Wilbour, Mrs. Charlotte B., care J. M. Furley, 74 W. 35th St., New York, N. Y. (28).
Wilcox, Miss Emily T., 85 Second St., Troy, N. Y. (33).

- Wilder, Alex., M. D., 565 Orange St., Newark, N. J. (29).
 Wilder, Graham, Louisville, Ky. (30).
 Wilkinson, Mrs. L. V., Brazeau P. O., Perry Co., Mo. (30).
 Willcox, Joseph, Media, Pa. (33).
 Willetts, Joseph C., Skaneateles, N. Y. (29).
 Williams, Benezette, 171 La Salle St., Chicago, Ill. (33).
 Williams, David, 83 Reade St., New York, N. Y. (29).
 Williams, Mrs. Drue T., Greensburg, Decatur Co., Ind. (30).
 Williams, Dr. E., 64 W. 7th St., Cincinnati, Ohio (30).
 Williams, Prof. Edward H., jr., Box 463, Bethlehem, Pa. (25).
 Williams, Emma M., M. D., 1423 Locust St., Philadelphia, Pa. (33).
 Williams, Francis H., M. D., 15 Arlington St., Boston, Mass. (29).
 Williams, Frank, Buffalo, N. Y. (25).
 Williams, Geo. Huntington, Johns Hopkins Univ., Baltimore, Md. (33).
 Williams, J. Francis, Salem, N. Y. (31).
 Williams, Janet W., Newton Lower Falls, Mass. (31).
 WILLIAMS, P. O., M.D., Watertown, Jefferson Co., N. Y. (24).
 Williams, Prof. S. G., Cornell Univ., Ithaca, N. Y. (33).
 Williamson, Prof. Andrew W., Rock Island, Ill. (32).
 Willoughby, Hugh L., Saratoga Springs, N. Y. (28).
 Wills, William R., Waltham, Mass. (30).
 Willson, Prof. Frederick N., Princeton, N. J. (33).
 Willson, Robert W., care Rev. E. B. Willson, Salem, Mass. (30).
 Willson, Z. G. (32).
 Wilmot, Thos. J., Commercial Cable Co., 4 Arch St., Boston, Mass. (27).
 Wilson, C. H., Rugby, Tenn. (30).
 Wilson, Chas. M., M.D., 1517 Walnut St., Philadelphia, Pa. (33).
 Wilson, H. C., Cincinnati Observatory, Mt. Lookout, Hamilton Co., O. (30).
 Wilson, Horace E., 1514 10th St. N., Minneapolis, Minn. (32).
 Wilson, J. M., State Normal School, Oshkosh, Wis. (33).
 Wilson, Dr. James C., 1437 Walnut St., Philadelphia, Pa. (33).
 Wilson, Joseph M., 435 Chestnut St., Philadelphia, Pa. (33).
 Wilson, M. C., Florence, Ala. (26).
 Wingate, Miss Hannah S., 208 Raymond St., Brooklyn, N. Y. (31).
 Winlock, Wm. C., U. S. Observ., Washington, D. C. (33).
 Winslow, Sam'l W., Room 30, Rialto Building, 131 Devonshire, cor. Milk St., Boston, Mass. (29).
 Winston, Prof. Chas. H., Richmond College, Richmond, Va. (30).
 Wisser, John P., 1st Lt. 1st Art'y, care Adj. Gen. U. S. A., Washington, D. C. (33).
 Wister, Mrs. Caspar, 1303 Arch St., Philadelphia, Pa. (33).
 Wister, Mrs. Owen J. (33).
 Witherowe, James P., Pittsburgh, Pa. (33).
 Withers, W. A., Raleigh, N. C. (33).
 Wolcott, Mrs. Henrietta L. T., Dedham, Mass. (29).
 WOOD, DR. ROBERT W., Jamaica Plain, Mass. (29).
 WOOD, WALTER, 400 Chestnut St., Philadelphia, Pa. (33).
 Woodward, R. S., care U. S. Geol. Survey, Washington, D. C. (33).

- Woodward, Richard W., 10 College St., New Haven, Conn. (29).
Worthen, T. W. D., Hanover, N. H. (28).
WRIGHT, ELIZUR, Box 109, Boston, Mass. (31).
Wright, Harrison, Sec'y Wyoming Hist. and Geol. Soc., Wilkes Barre, Pa. (29).
Würtele, Miss Minnie, Acton Vale, P. Q., Can. (32).
Wylie, Samuel B., 924 Chestnut St., Philadelphia, Pa. (30).
Wylie, Rev. T. W. J., D.D., 1824 Wylie St., Philadelphia, Pa. (33).

Youmans, Wm. Jay, M. D., Popular Science Monthly, 549 Broadway, New York, N. Y. (28).
Young, A. V. E., Harvard Chemical Laboratory, Cambridge, Mass. (33).
Young, Prof. Andrew H., Hanover, Ind. (30).
Young, Chas. Ira, care Prof. C. A. Young, Princeton, N. J. (33).

Zimmerman, Charles D., Buffalo, N. Y. (30).
Zimmerman, William, 164 Dearborn St., Chicago, Ill. (30).

[1517 MEMBERS.]

NOTE.—The omission of an address in the foregoing list indicates that letters directed to that last printed were returned as uncalled for. Information of the present address of the members so indicated is requested by the PERMANENT SECRETARY.

HONORARY FELLOW.¹

- *ROGERS, PROF. WILLIAM B., 117 Marlborough St., Boston, Mass. (1). 1881.

FELLOWS.²

- Abbe, Prof. Cleveland, Army Signal Office, Washington, D. C. (16). 1874.
 Abbott, Dr. Chas. C., Trenton, N. J. (29). 1883.
 Alexander, John S., 1935 Arch St., Philadelphia, Pa. (20). 1874.
 Allen, Joel A., Am. Mus. of Nat. History, Central Park, New York. (18). 1875.
 Alvord, Henry E., C. E., Houghton Farm, Mountainville, Orange Co., N. Y. (29). 1882.
 Ammen, Daniel, Rear Admiral U. S. Navy, Ammendale, Prince George Co., Md. (26). 1881.
 Anderson, Dr. Joseph, Waterbury, Conn. (29). 1883.
 Anthony, Prof. Wm. A., Cornell Univ., Ithaca, N. Y. (28). 1880.
 Arthur, J. C., Geneva, N. Y. (21). 1883.
 Ashburner, Charles A., 907 Walnut St., Philadelphia, Pa. (31). 1883.
 Ashburner, Wm., 1014 Pine St., San Francisco, Cal. (29). 1882.
 Atkinson, Edward, 31 Milk St., Boston, Mass. (29). 1881.
 Atwater, Prof. W. O., Wesleyan Univ., Middletown, Conn. (29). 1882.
 Austen, Peter T., Ph. D., Rutgers College, Lock Box No. 2, New Brunswick, N. J. (26). 1879.

 Bailey, Prof. W. W., Brown University, Providence, R. I. (18). 1874.
 Baird, Prof. S. F., Sec'y Smithsonian Inst., Washington, D. C. (1). 1875.
 Baker, Marcus, Coast and Geodetic Survey Office, Washington, D. C. (30). 1882.
 Ballou, Geo. F., Hartford, Conn. (29). 1881.
 BARKER, PROF. G. F., Univ. of Penn., Philadelphia, Pa. (13). 1875.
 Barnard, Edward E., Observ. of Vanderbilt Univ., Nashville, Tenn. (26). 1883.
 Barnard, F. A. P., President Columbia College, New York, N. Y. (7). 1874.
 Barnard, Prof. Wm. S., U. S. Dept. Agric., Washington, D. C. (24). 1880.
 Bartlett, Prof. Edwin J., Dartmouth College, Hanover, N. H. (28). 1883.

¹See ARTICLE VI of the Constitution. ²See ARTICLE IV of the Constitution.

* * * The number in parenthesis indicates the meeting at which the member joined the Association; the date at the end of the line the time when made a Fellow.

When the name is given in small capitals, it designates that the Fellow is also a life member, and is entitled to the Annual Volume of Proceedings.

* Deceased.

- Bartlett, John R., Comd'r U. S. N., Navy Dep't, Washington, D. C. (30). 1882.
- Bassett, Homer F., Waterbury, Conn. (23). 1874.
- Batchelder, Dr. J. H., Salem, Mass. (18). 1874.
- Batchelder, John M., 3 Divinity Avenue, Cambridge, Mass. (8). 1875.
- Bausch, Edward, Rochester, N. Y. (26). 1883.
- Beal, Prof. Wm. James, Agricultural College, Ingham Co., Mich. (24). 1880.
- Belknap, George E., Capt. U. S. N., care Fred. L. Wheeler & Co., Box 3522, Boston, Mass. (29). 1881.
- Bell, Dr. Alex. Graham, Scott Circle, 1500 Rhode Island Ave., Washington, D. C. (26). 1879.
- Bell, Samuel N., Manchester, N. H. (7). 1874.
- Bessey, Prof. Charles E., Univ. of Nebraska, Lincoln, Neb. (21). 1880.
- Bethune, Rev. C. J. S., Trinity Coll. School, Pt. Hope, Canada (18). 1875.
- Beyer, Henry G., Passed Ass't Surgeon U. S. N., Bureau Med. and Surg., Navy Dep't, Washington, D. C. (31). 1884.
- Bickmore, Prof. Albert S., American Museum of Natural History, 8th Ave. and 77th St., Central Park, New York, N. Y. (17). 1880.
- Billings, John S., Surgeon U. S. A., Surg. Gen'l's Office, Washington, D. C. (32). 1883.
- Blackham, George E., M. D., Dunkirk, N. Y. (25). 1883.
- Blake, Clarence J., M. D., Hotel Berkeley, Boston, Mass. (24). 1877.
- Blake, Eli W., New Haven, Conn. (1). 1874.
- Blake, Prof. Eli W., jr., Brown Univ., Providence, R. I. (15). 1874.
- Blake, Francis, Auburndale, Mass. (23). 1874.
- Blake, Prof. John R., Greenwood, S. C. (29). 1884.
- BOLTON, DR. H. CARRINGTON, Trinity Coll., Hartford, Conn. (17). 1875.
- Borden, Spencer, Fall River, Mass. (29). 1882.
- Bouvé, Thos. T., Boston Soc. Nat. Hist., Boston, Mass. (1). 1875.
- Bowditch, Prof. H. P., Jamaica Plain, Mass. (28). 1880.
- Bowditch, Henry I., M.D., 113 Boylston St., Boston, Mass. (2). 1875.
- Bowser, Prof. E. A., Rutgers College, New Brunswick, N. J. (28). 1881.
- Brackett, Prof. C. F., College of New Jersey, Princeton, N. J. (19). 1875.
- Brewer, Prof. Wm. H., New Haven, Conn. (20). 1875.
- Brewster, William, 61 Sparks St., Cambridge, Mass. (29). 1884.
- Britton, N. L., Columbia College, New York, N. Y. (29). 1882.
- Broadhead, Garland Carr, Pleasant Hill, Cass Co., Mo. (27). 1879.
- Brooks, Major Thomas B., Geol. State Surveys, Mich. and Wis., Newburgh, N. Y. (26). 1879.
- Bross, Hon. Wm., Tribune Office, Chicago, Ill. (7). 1874.
- Brown, Robert, jr., care of Yale College Observatory, New Haven, Conn. (11). 1874.
- Brown, Mrs. Robert, jr., New Haven, Conn. (17). 1874.
- BRUSH, PROF. GEORGE J., Yale College, New Haven, Conn. (4). 1874.
- Buckhout, W. A., State College, Centre Co., Pa. (20). 1881.

- Burnham, S. W., 3573 Vincennes Ave., Chicago, Ill. (25). 1877.
- Burr, Prof. William H., Troy, N. Y. (31). 1883.
- Burrill, Prof. T. J., Illinois Industrial Univ., Champaign, Ill. (29). 1882.
- Caldwell, Prof. Geo. C., Cornell University, Ithaca, N. Y. (23). 1875.
- Call, Prof. R. Ellsworth, 619 10th St., W., Des Moines, Iowa (29). 1882.
- Canby, William M., 1101 Delaware Avenue, Wilmington, Del. (17). 1878.
- Carhart, Prof. Henry S., Northwestern Univ., Evanston, Ill. (29). 1881.
- Carmichael, Prof. Henry, Bowdoin College, Brunswick, Me. (21). 1875.
- Carpenter, Lieut. W. L., U. S. A., Dunkirk, N. Y. (24). 1877.
- Carpmael, Charles, Director of Magnetic Observatory, Toronto, Can. (31). 1883.
- Carr, Lucien, Peabody Mus. Arch. and Ethn., Cambridge, Mass. (25). 1877.
- Case, Col. Theo. S., Ed. Western Review of Science, Kansas City, Mo. (27). 1883.
- Chamberlin, T. C., Washington, D. C. (21). 1877.
- Chandler, Prof. C. F., School of Mines, Columbia Coll., 50th St. cor. 4th Ave., New York, N. Y. (19). 1875.
- Chandler, Prof. Charles Henry, Ripon, Wis. (28). 1883.
- Chandler, Seth C., jr., Harvard Observatory, Cambridge, Mass. (29). 1882.
- Chandler, Prof. W. H., The Lehigh Univ., Bethlehem, Pa. (19). 1874.
- Chanute, O., Kansas City, Mo. (17). 1877.
- Chase, Prof. Pliny E., Haverford College P. O., Pa. (18). 1884.
- Chester, Prof. Albert H., Hamilton College, Clinton, N. Y. (29). 1882.
- Chickering, Prof. J. W., jr., Deaf Mute College, Washington, D. C. (22). 1877.
- Chittenden, Russell H., Ph. D., New Haven, Conn. (29). 1882.
- Clapp, Miss Cornelia M., Mt. Holyoke Seminary, South Hadley, Mass. (31). 1883.
- Clark, Alvan G., Cambridgeport, Mass. (28). 1880.
- Clark, Prof. John E., Mathematics, Yale College, New Haven, Conn. (17). 1875.
- Clarke, Miss Cora H., Jamaica Plain, Mass. (29). 1884.
- Clarke, Prof. F. W., U. S. Geological Survey, Washington, D. C. (18). 1874.
- Claypole, Prof. Edw. W., B. A., Buchtel Coll., Akron, Ohio. (30). 1882.
- Coffin, Prof. John H. C., U. S. Navy, Washington, D. C. (1). 1874.
- Coffin, Prof. Selden J., Ph.D. Lafayette College, Easton, Pa. (22). 1874.
- Collett, Prof. John, Chief Indiana Bureau of Statistics of Geology, Indianapolis, Ind. (17). 1874.
- Colvin, Verplanck, Supt. N. Y. State Adirondack Survey, Albany, N. Y. (28). 1880.
- Comstock, J. Henry, Cornell Univ., Ithaca, N. Y. (28). 1882.
- Comstock, Milton L., Prof. Math., Knox Coll., Galesburg, Ill. (21). 1874.
- Cook, Prof. A. J., Agricultural College, Lansing, Mich. (24). 1880.
- Cook, Prof. George H., New Brunswick, N. J. (4). 1875.
- Cooley, Prof. Le Roy C., Vassar College, Poughkeepsie, N. Y. (19). 1880.

- Cope, Prof. Edward D., 2100 Pine St., Philadelphia, Pa. (17). 1875.
 Coulter, Prof. John M., Wabash College, Crawfordsville, Ind. (32). 1884.
 Cox, Prof. Edward T., New Harmony, Ind. (19). 1874. [1881.
 Cox, Hon. Jacob D., Gilman Ave., Mt. Auburn, Cincinnati, Ohio (30).
 Coxe, Eckley B., Drifton, Luzerne Co., Pa. (23). 1879.
 Crandall, Prof. A. R., Lexington, Ky. (29). 1883.
 Crocker, Susan E., M. D., Lawrence, Mass. (21). 1874.
 Crosby, Wm. O., Mass. Inst. Technology, Boston, Mass. (29). 1881.
 Cross, Prof. Chas. R., Mass. Inst. Technology, Boston, Mass. (29). 1880.
 Cummings, Rev. Joseph, D. D., Pres. Northwestern Univ., Evanston, Ill. (13). 1874.
 Cutting, Hiram A., M. D., State Geologist, Lunenburg, Vt. (17). 1874.
- Dabney, Chas. W., jr., Ph. D., Agric. Experiment Station, Raleigh, N. C. (30). 1882.
- Dall, Mrs. Caroline H., 1667 31st St., Washington, D. C. (18). 1874.
 Dall, Wm. H., Smithsonian Institution, Washington, D. C. (18). 1874.
 Dana, Edward Salisbury, New Haven, Conn. (23). 1875.
 Dana, Prof. James D., New Haven, Conn. (1). 1875.
 Danforth, Edward, Dep't of Public Instruction, Elmira, N. Y. (11). 1874.
 Davenport, B. F., M. D., 751 Tremont St., Boston, Mass. (29). 1883.
 Davidson, Prof. Geo., Asst. Coast and Geodetic Survey, San Francisco, Cal. (29). 1881.
- Dawson, Dr. J. Wm., Principal McGill Coll., Montreal, Canada (10). 1875.
 Day, F. H., M. D., Wauwatosa, Wis. (20). 1874.
 Dean, George W., P. O. Box 92, Fall River, Mass. (15). 1874.
 Diller, J. Silas, U. S. Geol. Survey, Washington, D. C. (29). 1884.
 Dimmock, George, Cambridge, Mass. (22). 1874.
 Dinwiddie, Robert, 117 W. 43d St., New York, N. Y. (1). 1874.
 Dodge, Charles R., Washington, D. C. (22). 1874.
 Dodge, J. Richards, Washington, D. C. (31). 1884.
 Dodge, Prof. James A., Univ. of Minnesota, Minneapolis, Minn. (29). 1884.
 Dolbear, A. Emerson, College Hill, Mass. (20). 1880.
 Dorsey, Rev. J. Owen, Bureau of Ethnology, Washington, D. C. (31). 1883.
- Dow, Capt. John M., 69 Seventh Ave., New York, N. Y. (31). 1884.
- Draper, Dan'l, Ph.D., Director N. Y. Meteorological Observatory, Central Park, 64th St., Fifth Avenue, New York, N. Y. (29). 1881.
- Drown, Prof. Thos. M., Mass. Inst. Technology, Boston, Mass. (29). 1881.
- Du Bois, Prof. Aug. J., New Haven, Conn. (30). 1882.
- Dudley, Charles B., Altoona, Pa. (23). 1882.
- Dudley, P. H., 66½ Pine St., New York, N. Y. (29). 1884.
- Dudley, Wm. L., Miami Med. College, Cincinnati, Ohio (28). 1881.
- Dudley, Prof. Wm. R., Ithaca, N. Y. (29). 1883.
- Dunnington, Prof. F. P., University of Virginia, Va. (26). 1880.
- Dwight, Prof. Wm. B., Vassar College, Poughkeepsie, N. Y. (30). 1882.
- Dwyer, John, M. D., Hartford, Conn. (23). 1874.

- Eads, Jas. B., 34 Nassau St., New York, N. Y. (27). 1879.
- Eastman, Prof. J. R., U. S. Naval Observatory, Washington, D. C. (26). 1879.
- Eaton, Prof. D. G., Experiment Mills, Monroe Co., Pa. (19). 1874.
- Eaton, Hon. John, U. S. Commissioner of Education, Washington, D. C. (25). 1883.
- Eddy, Prof. H. T., University of Cincinnati, Cincinnati, O. (24). 1875.
- Edison, Thos. A., Menlo Park, N. J. (27). 1878.
- Edmands, J. Rayner, Observatory, Cambridge, Mass. (29). 1880.
- Egleston, Prof. Thos., School of Mines, Columbia College, New York, N. Y. (27). 1879.
- Eimbeck, Wm., U. S. C. S., Washington, D. C. (17). 1874.
- Elliott, Arthur H., School of Mines, Columbia College, New York, N. Y. (23). 1880.
- Elliott, Ezekiel B., Government Actuary, Treasury Dept., Washington, D. C. (10). 1874.
- Emerson, Prof. Benjamin K., Amherst, Mass. (19). 1877.
- Emerson, Prof. C. F., Dartmouth College, Hanover, N. H. (22). 1874.
- Emerton, James H., Salem, Mass. (18). 1875.
- Emery, Albert H., Stamford, Conn. (29). 1884.
- Emmons, S. F., U. S. Geol. Survey, Washington, D. C. (26). 1879.
- Engelmann, Geo. J., M.D., 3003 Locust St., St. Louis, Mo. (25). 1875.
- Ernst, Carl W., Daily Advertiser, Boston, Mass. (23). 1874.
- Evans, Asher B., 500 Pine St., Lockport, N. Y. (19). 1874.
- Fairbanks, Henry, Ph. D., St. Johnsbury, Vt. (14). 1874.
- Fairchild, H. L., Sec'y N. Y. Acad. Sciences, 102 E. 52d St., New York, N. Y. (28). 1883.
- Farlow, Dr. W. G., 29 Holyoke House, Boston, Mass. (20). 1875.
- Farmer, Moses G., Torpedo Station, Newport, R. I. (9). 1875.
- Ferguson, Maj. Thos. B., Ass't U. S. Fish Commissioner, Washington, D. C. (28). 1881.
- Fernald, Prof. Chas. H., State Agric. College, Orono, Me. (22). 1881.
- Fernald, Prof. M. C., State Agricultural College, Orono, Me. (22). 1883.
- Ferrel, Wm., Army Signal Office, Washington, D. C. (11). 1875.
- Ficklin, Prof. Joseph, Univ. of Missouri, Columbia, Mo. (20). 1878.
- Fitch, Edward H., Jefferson, Ashtabula Co., Ohio (11). 1874.
- Fletcher, Miss Alice C., care Peabody Museum, Cambridge, Mass. (29). 1883.
- Fletcher, James, Library of Parliament, Ottawa, Can. (31). 1883.
- Fletcher, Dr. Robert, Surgeon General's Office, U. S. A., Washington, D. C. (29). 1881.
- Flint, James M., Surgeon U. S. N., 42 Dartmouth St., Boston, Mass. (28). 1882.
- Foote, Dr. A. E., 1223 Belmont Avenue, Philadelphia, Pa. (21). 1874.
- Forbes, Prof. S. A., Champaign, Ill. (27). 1879.
- Foye, Prof. J. C., Lawrence Univ., Appleton, Wis. (29). 1884.
- FRAZER, DR. PERSIFOR, 917 Clinton St., Philadelphia, Pa. (24). 1879.

- Frazier, Prof. B. W., The Lehigh University, Bethlehem, Pa. (24). 1882.
 Freeman, H. C., Alto Pass, Union Co., Ill. (17). 1876.
 Freeman, Spencer H., Adelbert College, Cleveland, Ohio (29). 1883.
 French, Prof. Thomas, jr., No. 2 Chester Block, Auburn St., Cincinnati, Ohio (30). 1883.
 Frisby, Prof. Edgar, U. S. N. Observ., Washington, D. C. (28). 1880.
 Fuller, Andrew S., Ridgewood, Bergen Co., N. J. (24). 1882.
- Gage, Simon Henry, Ithaca, N. Y. (28). 1881.
 Gardiner, Rev. Frederic, D. D., Middletown, Conn. (23). 1874.
 Gardiner, James T., Director N. Y. State Survey, Albany, N. Y. (25). 1879.
 Garland, Rev. Dr. L. C., Chancellor Vanderbilt Univ., Nashville, Tenn. (25). 1877.
 Garman, S., care Museum Comp. Zoology, Cambridge, Mass. (20). 1874.
 Gatschet, Albert S., Bureau of Ethnology, Washington, D. C. (30). 1882.
 Genth, Dr. F. A., Univ. of Pennsylvania, Philadelphia, Pa. (24). 1875.
 Gilbert, G. K., Box 591, Washington, D. C. (18). 1874.
 Gillman, Henry, Detroit, Mich. (24). 1875.
 Gilman, Daniel C., Pres. Johns Hopkins Univ., Baltimore, Md. (10). 1875.
 Goessman, Prof. C. A., Mass. Agric. Coll., Amherst, Mass. (18). 1875.
 Goldschmidt, S. A., Ph. D., 55 Broadway, New York, N. Y. (24). 1880.
 Gooch, Frank A., U. S. Geological Survey, Washington, D. C. (25). 1880.
 Goodfellow, Edward, Ass't U. S. Coast and Geodetic Survey, Washington, D. C. (24). 1879.
 Grant, Mrs. Mary J., Brookfield, Conn. (23). 1874.
 Gratacap, L. P., Ph.B., 77th St. and 8th Ave., New York, N. Y. (27). 1884.
 Gray, Prof. Asa, Botanic Gardens, Cambridge, Mass. (1). 1875.
 Gray, Elisha, Ph. D., Highland Park, Ill. (32). 1883.
 Green, Traill, M. D., Easton, Pa. (1). 1874.
 Grimes, J. Stanley, 81 Randolph St., Chicago, Ill. (17). 1874.
 Grinnan, A. G., Rapidan Station, Va. Mid. R. R., Va. (7). 1875.
 Gulley, Prof. Frank A., Agricultural College, Oktibbeha Co., Miss. (30). 1883.
- Hagen, Dr. Hermann A., Mus. Comp. Zool., Cambridge, Mass. (17). 1875.
 Hague, Arnold, 10 West 29th St., New York, N. Y. (26). 1879.
 Hale, Horatio, Clinton, Ontario, Can. (30). 1882.
 Hall, Prof. Asaph, U. S. Naval Observ., Washington, D. C. (25). 1877.
 Hall, Prof. C. W., Univ. of Minnesota, Minneapolis, Minn. (28). 1883.
 Hall, Prof. Edwin H., 5 Avon St., Cambridge, Mass. (29). 1881.
 Hall, Prof. James, Albany, N. Y. (1). 1875.
 Hall, Prof. Lyman B., Haverford College, Pa. (31). 1884.
 Halsted, Byron D., Agricultural College, Ames, Iowa (29). 1883.
 Hamlin, Dr. A. C., Bangor, Me. (10). 1874.
 HANAMAN, C. E., Troy, N. Y. (19). 1883.
 Hardy, Prof. A. S., Dartmouth College, Hanover, N. H. (28). 1883.
 Harger, Oscar, Yale College Museum, New Haven, Conn. (25). 1879.
 HARKNESS, PROF. WM., U. S. N. Observ., Washington, D. C. (26). 1878.

- Harrington, Prof. Mark W., Ann Arbor, Mich. (22). 1875.
 Harrison, Dr. B. F., Wallingford, Conn. (11). 1874.
 Hasbrouck, Prof. I. E., 281 Ryerson St., Brooklyn, N. Y. (23). 1874.
 Hastings, C. S., Sheffield Sci. School of Yale College, New Haven, Conn. (25). 1878.
 Hayden, Dr. F. V., 1910 Arch St., Philadelphia, Pa. (29). 1881.
 Haynes, Henry W., 239 Beacon St., Boston, Mass. (28). 1884.
 Hazen, Wm. B., Brig. and B'vt. Maj. Gen'l, Chief Signal Officer, U. S. A., Washington, D. C. (30). 1882.
 Hedrick, B. S., Exam'r U. S. Patent Office, Washington, D. C. (19). 1874.
 Henshaw, Henry W., Care Major J. W. Powell, 910 M St., Washington, D. C. (24). 1877.
 Herrick, Clarence L., Granville, Ohio (31). 1884.
 Hervey, Rev. A. B., Taunton, Mass. (22). 1879.
 Hilgard, Prof. E. W., Univ. of California, Berkeley, Cal. (11). 1874.
 Hilgard, Prof. J. E., Washington, D. C. (4). 1874.
 Hill, Franklin C., P. O. Box 338, Princeton, N. J. (29). 1881.
 Hill, George W., Nautical Almanac Office, Navy Department, Washington, D. C. (23). 1874.
 Hill, Rev. Dr. Thomas, 738 Congress St., Portland, Me. (3). 1875.
 Himes, Prof. Charles F., Carlisle, Pa. (29). 1882.
 Hinrichs, Prof. Gustavus, State University, Iowa City, Iowa (17). 1874.
 Hitchcock, Prof. Charles H., Hanover, N. H. (11). 1874.
 Hitchcock, Romyn, Washington, D. C. (29). 1881.
 Hoadley, J. C., 28 State St., Room 28, Boston, Mass. (29). 1884.
 Hodges, N. D. C., Salem, Mass. (29). 1882.
 Hoffman, Dr. Fred., 183 Broadway, New York, N. Y. (28). 1881.
 Holden, Prof. E. S., Director Washburn Observatory, Univ. of Wisconsin, Madison, Wis. (23). 1875.
 Holman, Silas W., Mass. Inst. of Technology, Boston, Mass. (31). 1883.
 Holmes, Dr. Oliver Wendell, 296 Beacon St., Boston, Mass. (29). 1881.
 Holmes, Wm. H., Smithsonian Institution, Washington, D. C. (30). 1883.
 Horsford, Prof. E. N., Cambridge, Mass. (1). 1876.
 Hosea, Lewis M., Johnston Building, Cincinnati, Ohio (30). 1883.
 Hotchkiss, Jed., Staunton, Va. (31). 1883.
 Hough, G. W., Director Dearborn Observatory, Chicago, Ill. (15). 1874.
 Hovey, Rev. Horace C., 1519 Park Ave., Minneapolis, Minn. (29). 1883.
 Hoy, Philo R., M. D., Racine, Wis. (17). 1875.
 Hunt, George, Providence, R. I. (9). 1874.
 Hunt, Dr. T. Sterry, Montreal, Canada (1). 1874.
 Huntington, Prof. J. H., Boston, Mass. (19). 1874.
 Hyatt, Prof. Alpheus, Natural History Society, Boston, Mass. (18). 1875.
 Hyatt, James, Stanfordville, Dutchess Co., N. Y. (10). 1874.
 Hyde, Prof. E. W., Walnut Hills, Cincinnati, Ohio (25). 1881.

- Iddings, Joseph P., U. S. Geol. Survey, Washington, D. C. (31). 1884.
 Irving, Roland D., Wis. State Geol. Survey, Madison, Wis. (26). 1879.
- James, Jos. F., 108 Broadway, Cincinnati, Ohio (30). 1882.
 Jayne, Horace F., 1826 Chestnut St., Philadelphia, Pa. (29). 1884.
 Jeffries, B. Joy, M. D., 15 Chestnut St., Boston, Mass. (29). 1881.
 Jenks, Elisha T., Middleborough, Mass. (22). 1874.
 Jenks, Prof. J. W. P., Middleborough, Mass. (2). 1874.
 Jewell, Theo. F., Lt. Comdr. U. S. N., Torpedo Station, Newport, R. I. (25). 1882.
 Jillson, Dr. B. C., Illinois Industrial Univ., Champaign, Ill. (14). 1881.
 Johnson, Prof. S. W., 54 Trumbull St., New Haven, Conn. (22). 1874.
 Johnson, Prof. W. W., Naval Acad., Annapolis, Md. (29). 1881.
 Joy, Prof. Charles A., care F. Hoffmann, Stockbridge, Mass. (8). 1879.
 Julien, A. A., School of Mines, Columbia Coll., New York, N. Y. (24). 1875.
- Kedzie, Prof. Robert C., Lansing, Mich. (29). 1881.
 Kellicott, David S., Buffalo, N. Y. (31). 1883.
 Kendall, Prof. E. Otis, 3826 Locust St., Philadelphia, Pa. (29). 1882.
 Kent, William, 26 Highland Ave., Jersey City, N. J. (26). 1881.
 Kerr, Prof. W. C., Raleigh, N. C. (10). 1874.
 Kershner, Prof. Jefferson E., Lancaster City, Pa. (29). 1883.
 Kinnicutt, Leonard P., 5 Chestnut St., Worcester, Mass. (28). 1883.
 Kirkwood, Prof. Daniel, Bloomington, Ind. (7). 1874.
 Kunz, G. F., with Tiffany & Co., New York, N. Y. (29). 1883.
- Lambert, Rev. Thomas R., D.D., Charlestown, Mass. (18). 1874.
 Landreth, Prof. Olin H., Vanderbilt Univ., Nashville, Tenn. (28). 1883.
 Langdon, Dr. F. W., 65 West 7th St., Cincinnati, Ohio (30). 1882.
 Langley, Prof. J. W., Univ. of Michigan, Ann Arbor, Mich. (23). 1875.
 Langley, Prof. S. P., Director of Observatory, Allegheny, Pa. (18). 1874.
 Lanza, Prof. Gaetano, Mass. Inst. of Technology, Boston, Mass. (29). 1882.
- Larkin, Edgar L., New Windsor, Mercer Co., Ill. (28). 1883.
 Lattimore, Prof. S. A., Univ. of Rochester, Rochester, N. Y. (15). 1874.
 Lawrence, George N., 45 E. 21st St., New York, N. Y. (7). 1877.
 Lazenby, Prof. Wm. R., Ithaca, N. Y. (30). 1882.
 Lea, Dr. Isaac, 1622 Locust St., Philadelphia, Pa. (1). 1875.
 LeConte, Prof. Joseph, Univ. of Cal., Berkeley, Cal. (29). 1881.
 Ledoux, Albert R., Ph. D., 10 Cedar St., New York, N. Y. (26). 1881.
 Leeds, Prof. Albert R., Stevens Institute, Hoboken, N. J. (23). 1874.
 Leonard, N. R., State Univ., Iowa City, Iowa (21). 1875.
 Lesley, Prof. J. Peter, State Geol. of Pa., 1008 Clinton St., Philadelphia, Pa. (2). 1874.
- Lewis, Prof. H. Carvill, High St., Germantown, Pa. (26). 1880.
 LILLY, GEN. WM., Mauch Chunk, Carbon Co., Pa. (28). 1882. Patron.

- Lintner, J. A., N. Y. State Entomologist, Room 27, Capitol, Albany, N. Y. (22). 1874.
- Litton, Abram, 2220 Eugenia St., St. Louis, Mo. (28). 1879.
- Lockwood, Rev. Samuel, Freehold, Monmouth Co., N. J. (18). 1875.
- Loomis, Prof. Elias, New Haven, Conn. (1). 1874.
- Lord, Prof. Nat. W., State Univ., Columbus, Ohio (29). 1881.
- Loudon, Prof. James, Toronto, Can. (25). 1881.
- Loughridge, Prof. R. H., Ass't State Geol., Frankfort, Ky. (21). 1874.
- Love, Edward G., School of Mines, Columbia College, New York, N. Y. (24). 1882.
- Lovering, Prof. Joseph, Harvard University, Cambridge, Mass. (2). 1875.
- Lull, Edward P., Captain U. S. N., care Navy Dep't, Washington, D. C. (28). 1880.
- Lupton, Prof. N. T., Vanderbilt University, Nashville, Tenn. (17). 1874.
- Lyle, David Alexander, Capt. of Ordnance U. S. A., National Armory, Springfield, Mass. (28). 1880.
- Lyman, Prof. Chester S., 88 Trumbull St., New Haven, Conn. (4). 1875.
- Lyman, Hon. Theodore, Brookline, Mass. (23). 1875.
- Lyon, Dr. Henry, 34 Monument Sq., Charlestown, Mass. (18). 1874.
- Mabery, Prof. C. F., Case School of Applied Science, Cleveland, Ohio (29). 1881.
- Macfarlane, James, Towanda, Pa. (29). 1882.
- Mackintosh, James B., School of Mines, Columbia College, New York, N. Y. (27). 1883.
- Macloskie, Prof. George, College of New Jersey, Princeton, N. J. (25). 1882.
- Mallery, Brevet Lieut. Col. Garrick, U. S. Army, Bureau of Ethnology, Washington, D. C. (26). 1879.
- MANN, B. PICKMAN, U. S. Dep't of Agric., Washington, D. C. (22). 1874.
- Marcy, Oliver, LL.D., Evanston, Ill. (10). 1874.
- Markoe, Geo. F. H., 61 Warren St., Roxbury, Mass. (29). 1881.
- MARSH, PROF. O. C., Yale College, New Haven, Conn. (15). 1874.
- Martin, Prof. Daniel S., 236 West 4th St., New York, N. Y. (23). 1879.
- Martin, Prof. H. Newell, Johns Hopkins Univ., Baltimore, Md. (27). 1880.
- Martin, Prof. Wm. J., Davidson College, N. C. (31). 1884.
- Mason, Prof. Otis T., Columbian University, Washington, D. C. (25). 1877.
- Mayer, Prof. A. M., So. Orange, N. J. (19). 1874.
- McCauley, Capt. C. A. H., Ass't Q. M., U. S. A., 321 Michigan Ave., Chicago, Ill. (29). 1881.
- McGee, W. J., U. S. Geol. Survey, Washington, D. C. (27). 1882.
- McMurtrie, William, Ill. Indust. Univ., Champaign, Ill. (22). 1874.
- McNair, Lt. Commander Antoine R., U. S. N., Box 1071, Saratoga Springs, N. Y. (28). 1882.
- McRae, Hamilton S., Supt. of Schools, Marion, Ind. (20). 1874.
- Meehan, Thomas, Germantown, Pa. (17). 1875.
- Mees, Carl Leo, Columbus, Ohio (24). 1876.

- Mendenhall, Prof. T. C., U. S. Signal Service, Washington, D. C. (20). 1874.
- Merriman, C. C., Rochester, N. Y. (29). 1880.
- Michelson, A. A., Master U. S. N., 7 Rockwell St., Cleveland, Ohio (26). 1879. [1880.]
- Minot, Dr. Charles Sedgwick, 25 Mt. Vernon St., Boston, Mass. (28).
- Minot, Francis, M. D., 65 Marlborough St., Boston, Mass. (29). 1884.
- Mitchell, Miss Maria, Vassar College, Poughkeepsie, N. Y. (4). 1874.
- Mixer, Prof. Wm. G., New Haven, Conn. (30). 1882.
- Moore, Prof. J. W., M. D., Lafayette College, Easton, Pa. (22). 1874.
- Morley, Prof. Edward W., 749 Republic St., Cleveland, Ohio (18). 1876.
- Morris, Rev. John G., Baltimore, Md. (12). 1874.
- Morse, Prof. E. S., Salem, Mass. (18). 1874.
- Morton, H., Stevens Institute Technology, Hoboken, N. J. (18). 1875.
- Moses, Prof. Thos. F., Urbana Univ., Urbana, Ohio (25). 1883.
- Munroe, Prof. C. E., U. S. Naval Academy, Annapolis, Md. (22). 1874.
- Murfeldt, Miss Mary E., Kirkwood, Mo. (27). 1881.
- Nason, Prof. H. B., Rensselaer Polytechnic Inst., Troy, N. Y. (13). 1874.
- Neale, Arthur T., Ph. D., New Brunswick, N. J. (29). 1882.
- Nelson, Prof. A. B., Centre College, Danville, Ky. (30). 1882.
- Nelson, Prof. Edward T., Delaware, Delaware Co., Ohio (24). 1877.
- Newberry, Prof. J. S., Columbia College, New York, N. Y. (5). 1875.
- Newcomb, Prof. S., Navy Dep't, Washington, D. C. (13). 1874.
- Newton, Hubert A., New Haven, Conn. (6). 1874.
- Nichols, E. L., Ph. D., Univ. of Kansas, Lawrence, Kansas (28). 1881.
- Nichols, Prof. W. R., Mass. Inst. Technology, Boston, Mass. (18). 1875.
- Niles, Prof. W. H., Cambridge, Mass. (16). 1874.
- Nipher, Prof. F. E., Washington University, St. Louis, Mo. (24). 1876.
- Norton, Lewis M., Ph. D., Mass. Inst. of Technology, Boston, Mass. (29). 1884.
- Oliver, Prof. James E., Cornell University, Ithaca, N. Y. (7). 1875.
- Oliver, Miss Mary E., Cascadilla Hotel, Ithaca, N. Y. (20). 1874.
- Ordway, Prof. John M., Tulane Univ., New Orleans, La. (9). 1875.
- Orton, Prof. Edward, President Ohio Agricultural and Mechanical College, Columbus, Ohio (19). 1875.
- Osborn, Henry F., S. D., Garrisons, N. Y. (29). 1883.
- Osborn, Herbert, Ames, Iowa (32). 1884.
- Osborne, J. W., 212 Delaware Ave. N. E., Washington, D. C. (22). 1874.
- Osler, Prof. William, McGill College, Montreal, Canada (28). 1881.
- Owen, Dr. Richard, New Harmony, Ind. (20). 1874.
- Packard, Dr. A. S., 115 Angell St., Providence, R. I. (16). 1875.
- Paine, Cyrus F., 242 East Ave., Rochester, N. Y. (12). 1874.
- Paine, Nathaniel, Worcester, Mass. (18). 1874.
- Palfray, Hon. Charles W., Salem, Mass. (21). 1874.

- Parke, John G., Lt. Col. Corps of Eng'rs, Bvt Maj. Gen. U. S. A.,
Office of Chief of Engineers, Washington, D. C. (29). 1881.
- Parkhurst, H. M., Law Stenographer, 25 Chambers St., New York, N. Y.
(23). 1874.
- Payne, Prof. Wm. W., Carleton College Observ., Northfield, Minn. (30).
1883.
- Peckham, S. F., Providence, R. I. (18). 1875.
- Pedrick, Wm. R., Lawrence, Mass. (22). 1875.
- Peet, Rev. Stephen D., Clinton, Wis. (24). 1881.
- Peirce, Prof. James M., Cambridge, Mass. (28). 1881.
- Penhallow, Prof. D. P., McGill College, Montreal, Can. (30). 1882.
- Perkins, Prof. George H., Burlington, Vt. (17). 1882.
- Perkins, Maurice, Schenectady, N. Y. (15). 1875.
- Peter, Dr. Robert, Ky. Geol. Survey, Lexington, Ky. (29). 1881.
- Pettee, Prof. William H., Ann Arbor, Mich. (24). 1875.
- Phillips, A. W., New Haven, Conn. (24). 1879.
- Phippen, Geo. D., Salem, Mass. (18). 1874.
- Pickering, Prof. E. C., Director of Observ., Cambridge, Mass. (18). 1875.
- Pickering, William H., Inst. Technology, Boston, Mass. (29). 1883.
- Pike, Dr. William H., University College, Toronto, Can. (29). 1881.
- Pilling, James C., Box 591, Washington, D. C. (28). 1882.
- Platt, Franklin, Ass't Geologist. 2nd Geol. Survey of Pa., 615 Walnut St.,
Philadelphia, Pa. (27). 1882.
- Pohlman, Dr. Julius, Buffalo, N. Y. (32). 1884.
- Potter, Prof. William B., Washington Univ., St. Louis, Mo. (25). 1879.
- Powell, Major J. W., U. S. Geologist, 910 M St., Washington, D. C. (23).
1875.
- Prentiss, D. Webster, M. D., 1224 9th St., N. W., Washington, D. C. (29).
1882.
- Prescott, Prof. Albert B., Ann Arbor, Mich. (23). 1875.
- Pritchett, Henry S., Observatory, Washington Univ., St. Louis. Mo.
(29). 1881.
- Pulsifer, Wm. H., St. Louis, Mo. (26). 1879.
- Pumpelly, Prof. Raphael, U. S. Geol. Survey, Newport, R. I. (17). 1875.
- Putnam, F. W., Curator Peabody Museum American Archæology and
Ethnology, Cambridge, Mass. Address as Permanent Secretary
A. A. A. S., Salem, Mass. (10). 1874.
- Pyncheon, Rev. T. R., Pres't Trinity Coll., Hartford, Conn. (23). 1875.
- Quincy, Edmund, 88 Clinton St., Boston, Mass. (11). 1874.
- Rauch, Dr. John H., Chicago, Ill. (11). 1875.
- Raymond, Rossiter W., 17 Burling Slip, New York, N. Y. (15). 1875.
- Redfield, J. H., care A. Whitney & Sons, Philadelphia, Pa. (1). 1874.
- Reed, E. Baynes, London, Ontario, Can. (27). 1882.
- Rees, Prof. John K., Columbia College, New York, N. Y. (26). 1878.
- Remsen, Prof. Ira, Johns Hopkins University, Baltimore, Md. (22). 1875.

- Rice, John M., U. S. Naval Academy, Annapolis, Md. (25). 1881.
- Rice, Prof. Wm. North, Wesleyan Univ., Middletown, Conn. (18). 1874.
- Richards, Prof. Robert H., Mass. Inst. Tech., Boston, Mass. (22). 1875.
- Richards, Mrs. Robert H., Mass. Inst. of Tech., Boston, Mass. (23). 1878.
- Richardson, Clifford, Dept. of Agric., Washington, D. C. (30). 1884.
- Ricketts, Pierre de Peyster, Ph. D., 10 Cedar St., New York, N. Y. (26). 1880.
- RILEY, PROF. C. V., U. S. Entomologist, 1700 13th St. N. W., Washington, D. C. (17). 1874.
- Ritchie, E. S., 87 Franklin St., Boston, Mass. (10). 1877.
- Robinson, Prof. S. W., Univ. of Ohio, Columbus, Ohio (30). 1883.
- Rockwell, Gen. Alfred P., Office Great Falls Manufacturing Co., Boston, Mass. (10). 1882.
- Rockwell, Chas. H., Box 293, Tarrytown, N. Y. (28). 1883.
- Rockwood, Prof. Charles G., jr., College of New Jersey, Princeton, N. J. (20). 1874.
- Rogers, Fairman, 202 West Rittenhouse Square, Philadelphia, Pa. (11). 1874.
- Rogers, W. A., Ass't Prof. Harvard College Observ., Cambridge, Mass. (15). 1875.
- Rominger, Dr. Carl, Ann Arbor, Mich. (21). 1879.
- Rood, Prof. O. N., Columbia College, New York, N. Y. (14). 1875.
- Roosevelt, Clinton, 11 Wall St., New York, N. Y. (11). 1874.
- Rosenspitz, Dr. Alexander, Rabbi, Lock Box 688, Jacksonville, Fla. (26). 1883.
- Ross, Waldo O., 189 Devonshire St., Boston, Mass. (29). 1882.
- Rowland, Prof. Henry A., Baltimore, Md. (29). 1880.
- Runkle, Prof. J. D., Mass. Inst. of Tech., Boston, Mass. (2). 1875.
- Russell, I. C., U. S. Geological Survey, Washington, D. C. (25). 1882.
- Rutherford, Lewis M., 175 Second Ave., New York, N. Y. (13). 1875.
- Sadtler, Prof. Saml. P., Univ. of Pa., Philadelphia, Pa. (22). 1875.
- Safford, Dr. James M., Nashville, Tenn. (6). 1875.
- Sampson, Com'd W. T., U.S.N., Torpedo Station, Newport, R. I. (25). 1881.
- Saunders, William, London, Ontario, Canada (17). 1874.
- Schanck, Prof. J. Stillwell, Princeton, New Jersey (4). 1882.
- Schott, Charles A., U. S. Coast and Geodetic Survey Office, Washington, D. C. (8). 1874.
- Schweitzer, Prof. Paul, State Univ. of Mo., Columbia, Mo. (24). 1877.
- SCUDDER, SAMUEL H., Cambridge, Mass. (13). 1874.
- Seaman, W. H., Microscopist, 1424 11th St. N. W., Washington, D. C. (23). 1874.
- Seiler, Carl, M. D., Philadelphia, Pa. (29). 1882.
- Sestini, Rev. B., Woodstock, Md. (29). 1882.
- Sharples, Stephen P., 13 Broad St., Boston, Mass. (29). 1884.
- Sheafer, P. W., Pottsville, Pa. (4). 1879.

- Sias, Solomon, M. D., Schoharie, Schoharie Co., N. Y. (10). 1874.
- Sill, Hon. Elisha N., Cuyahoga Falls, Ohio (6). 1874.
- Silliman, Prof. Justus M., Lafayette College, Easton, Pa. (19). 1874.
- Skinner, Joseph J., Ithaca, N. Y. (23). 1880.
- Smiley, Charles W., 1443 Mass. Ave., Washington, D. C. (28). 1883.
- Smith, Edwin, Ass't U. S. Coast and Geodetic Survey, Washington, D. C. (30). 1882.
- Smith, Mrs. Erminnie A., 203 Pacific Ave., Jersey City, N. J. (25). 1880.
- Smith, Prof. Eug. A., University of Alabama, Tuscaloosa, Ala. (20). 1877.
- Smith, Prof. Francis H., Univ. of Virginia, Charlottesville, Va. (26). 1880.
- SMITH, QUINTIUS C., M. D., No. 704 Congress Ave., Austin, Texas (26). 1881.
- Smith, Prof. S. I., Yale College, New Haven, Conn. (18). 1875.
- Snock, Prof. John Conover, New York State Museum, Albany, N. Y. (23). 1879.
- Snow, Prof. F. H., Lawrence, Kan. (29). 1881.
- Snyder, Prof. Monroe B., High School Observatory, Philadelphia, Pa. (24). 1882.
- Spencer, Prof. J. William, Univ. of Missouri, Columbia, Mo. (28). 1882.
- Spencer, John W., Geol., Paxton, Sullivan Co., Ind. (20). 1874.
- Springer, Dr. Alfred, Box 579, Cincinnati, Ohio (24). 1880.
- Stallo, J. B., Masonic Temple, Cincinnati, Ohio (30). 1882.
- Stanard, Benjamin A., Cleveland, Ohio (6). 1874.
- Stearns, R. E. C., care Smithsonian Inst., Washington, D. C. (18). 1874.
- Steiner, Dr. Lewis H., Enoch Pratt Free Library, Baltimore, Md. (7). 1874.
- STEPHENS, W. HUDSON, Lowville, N. Y. (18). 1874.
- Sternberg, George M., Surgeon U. S. A., Johns Hopkins Univ., Baltimore, Md. (24). 1880.
- Stevens, W. LeConte, 170 Joralemon St., Brooklyn, N. Y. (29). 1882.
- Stockwell, John N., 1008 Case Avenue, Cleveland, Ohio (18). 1875.
- Stone, George H., Colorado Springs, Col. (29). 1882.
- Stone, Mrs. Leander, 3352 Indiana Avenue, Chicago, Ill. (22). 1874.
- Stone, Ormond, Director Leander McCormick Observatory, Univ. of Va., Va. (24). 1876.
- Storrs, Henry E., Jacksonville, Ill. (20). 1874.
- Story, Wm. E., Johns Hopkins Univ., Baltimore, Md. (29). 1881.
- Stuart, Prof. A. P. S., Lincoln, Nebraska (21). 1874.
- Sturtevant, E. Lewis, M. D., Geneva, N. Y. (29). 1882.
- Sutton, Dr. George, Aurora, Dearborn Co., Ind. (20). 1881.
- Swift, Lewis, Ph. D., Rochester, N. Y. (29). 1882.
- Tainter, Sumner, 1221 Connecticut Ave., Washington, D. C. (29). 1881.
- Tappan, Prof. Eli T., Kenyon College, Gambier, Ohio (20). 1874.
- Taylor, Wm. B., Smithsonian Institution, Washington, D. C. (29). 1881.
- Terry, Prof. N. M., U. S. Naval Academy, Annapolis, Md. (23). 1874.

- Thomas, Benj. F., Ph. D., Univ. State of Missouri, Columbia, Mo. (29). 1882.
- Thomas, Prof. Cyrus, Carbondale, Ill. (30). 1882.
- Thurston, Prof. R. H., Sibley College, Cornell Univ., Ithaca, N. Y. (23). 1875.
- Todd, Prof. David P., Director Lawrence Observatory, Amherst College, Amherst, Mass. (27). 1881.
- Townshend, Prof. N. S., Ohio State Univ., Columbus, Ohio (17). 1881.
- Tracy, Sam'l M., Columbia, Boone Co., Mo. (27). 1881.
- Trembley, J. B., M. D., 952 8th St., Oakland, Alameda Co., Cal. (17). 1880.
- Trowbridge, Prof. John, Harvard University, Cambridge, Mass. (25). 1876.
- Trowbridge, Prof. W. P., New Haven, Conn. (10). 1874.
- True, Fred W., U. S. National Museum, Washington, D. C. (28). 1882.
- Trumbull, Dr. J. Hammond, Hartford, Conn. (29). 1882.
- Tuttle, Prof. Albert H., Columbus, Ohio (17). 1874.
- Uhler, Philip R., 218 W. Hoffman St., Baltimore, Md. (19). 1874.
- Upham, Warren, Nashua, N. H. (25). 1880.
- Upton, Winslow, Brown Univ., Providence, R. I. (29). 1883.
- Van der Weyde, P. H., M.D., Box 3619, New York, N. Y. (17). 1874.
- Van Dyck, Prof. Francis Cuyler, New Brunswick, N. J. (28). 1882.
- Van Vleck, Prof. John M., Middletown, Conn. (23). 1875.
- Verrill, Prof. A. E., Yale College, New Haven, Conn. (16). 1875.
- Vose, Prof. George L., Mass. Inst. Technology, Boston, Mass. (15). 1875.
- Wachsmuth, Charles, 111 Marietta St., Burlington, Iowa (30). 1884.
- Wadsworth, Prof. M. Edward, Ph. D., Colby Univ., Waterville, Me. (23). 1874.
- Walcott, Charles D., Natl. Museum, Washington, D. C. (25). 1882.
- Waldo, Leonard, S. D., New Haven, Conn. (28). 1880.
- Walker, J. R., D. D. S., Bay Saint Louis, Hancock Co., Miss. (19). 1874.
- Wallace, Wm., Ansonia, Conn. (28). 1882.
- WALLER, E., School of Mines, Columbia College, New York, N. Y. (23). 1874.
- Walling, H. F., Cambridge, Mass. (16). 1874.
- Walmsley, W. H., 1016 Chestnut St., Philadelphia, Pa. (28). 1883.
- Ward, Prof. Henry A., Rochester, N. Y. (13). 1875. [1879.
- Ward, Lester F., U. S. Geological Survey, Washington, D. C. (26).
- Ward, Dr. R. H., 53 Fourth St., Troy, N. Y. (17). 1874.
- Warder, Prof. Robert B., Lafayette, Ind. (19). 1881.
- WARNER, JAMES D., 199 Baltic St., Brooklyn, N. Y. (18). 1874.
- Warren, Cyrus M., Brookline, Mass. (29). 1882.
- Warren, Prof. S. Edward, Newton, Mass. (17). 1875.
- Watson, Sereno, Botanic Gardens, Cambridge, Mass. (22). 1875.

- WATSON, PROF. WM., 107 Marlborough St., Boston, Mass. (12). 1884.
 Wead, Prof. Charles K., Univ. of Mich., Ann Arbor, Mich. (23). 1880.
 Webb, Prof. J. Burkitt, Cornell University, Ithaca, N. Y. (31). 1883.
 Webster, Prof. H. E., Union College, Schenectady, N. Y. (23). 1882.
 Webster, Prof. N. B., Principal Webster Inst., Norfolk, Va. (7). 1874.
 Wells, Daniel H., Hartford, Conn. (18). 1875.
 Westcott, O. S., Maywood, Cook Co., Ill. (21). 1874.
 Wheatland, Dr. Henry, President Essex Inst., Salem, Mass. (1). 1874.
 Wheeler, Prof. C. Gilbert, 81 Clark St., Chicago, Ill. (18). 1883.
 Wheeler, Capt. Geo. M., U. S. E., Lock Box 93, Washington, D. C. (25). 1879.
 Wheeler, Orlando B., Ass't U.S. Lake Survey, Detroit, Mich. (24). 1882.
 Wheildon, W. W., Box 229, Concord, Mass. (13). 1874.
 White, Prof. C. A., Le Droit Park, Washington, D. C. (17). 1875.
 White, Prof. I. C., Univ. of W. Va., Morgantown, W. Va. (25). 1882.
 Whitfield, R. P., American Museum Natural History, 77th St. & 8th Avenue, New York, N. Y. (18). 1874.
 Whiting, Miss Sarah F., Wellesley College, Wellesley, Mass. (31). 1883.
 Whitney, Solon F., Watertown, Mass. (20). 1874.
 Whittlesey, Col. Charles, 1305 Euclid Ave., Cleveland, Ohio (1). 1875.
 Wilber, G. M., Pine Plains, N. Y. (19). 1874.
 Wilbur, A. B., Port Jervis, Orange Co., N. Y. (23). 1874.
 Wilder, Prof. Burt G., Cornell University, Ithaca, N. Y. (22). 1875.
 Wiley, Prof. Harvey W., Dept. of Agric., Washington, D. C. (21). 1874.
 Williams, Charles H., M. D., 15 Arlington St., Boston, Mass. (22). 1874.
 Williams, Henry Shaler, Cornell Univ., Ithaca, N. Y. (18). 1882.
 Williams, Prof. Henry W., 15 Arlington St., Boston, Mass. (11). 1874.
 Wilson, Prof. Daniel, President University College, 117 Bloor St., Toronto, Canada (25). 1876.
 Winchell, Prof. Alex., Ann Arbor, Mich. (3). 1875.
 Winchell, Prof. N. H., Univ. of Minnesota, Minneapolis, Minn. (19). 1874.
 Woerd, Chas. V., Am. Watch Co., Waltham, Mass. (29). 1881.
 Wood, Prof. De Volson, Hoboken, N. J. (29). 1881.
 Woodbury, C. J. H., 31 Milk St., Boston, Mass. (29). 1884.
 Woodward, Prof. Calvin M., 1761 Missouri Ave., St. Louis, Mo. (32). 1884.
 Wormley, T. G., Univ. of Pennsylvania, Philadelphia, Pa. (20). 1878.
 Worthen, A. H., Springfield, Ill. (5). 1874.
 Wright, Prof. Albert A., Oberlin College, Oberlin, Ohio (24). 1880.
 Wright, Prof. Arthur W., Yale College, New Haven, Conn. (14). 1874.
 Wright, Rev. Geo. F., Oberlin College, Oberlin, Ohio (29). 1882.
 Würtele, Rev. Louis C., Acton Vale, Province of Quebec, Can. (11). 1875.
 Wyckoff, Wm. C., 44 Howard St., New York (20). 1874.
 Wylie, Prof. Theoph. A., Indiana Univ., Bloomington, Ind. (20). 1874.
 Youmans, Prof. Edward L., New York, N. Y. (6). 1874.

Young, C. A., Prof. of Astronomy, College of New Jersey, Princeton,
New Jersey (18). 1874.

Zentmayer, Joseph, 147 So. Fourth St., Philadelphia, Pa. (29). 1882.

[562 FELLOWS.]

TOTAL NUMBER OF MEMBERS OF THE ASSOCIATION, 2079.

DECEASED MEMBERS.

[Information respecting omissions in this list, and the date of birth and of decease of any of the former members, is requested by the Permanent Secretary.]

- Abbe, George W., New York, N. Y. (23). Died Sept. 25, 1879.
- Abert, J. J., Washington, D. C. (1). Born in 1785. Died January 27, 1863.
- Adams, C. B., Amherst, Mass. (1). Born January 11, 1814. Died Jan'y 19, 1853.
- Adams, Edwin F., Charlestown, Mass. (18).
- Adams, Samuel, Jacksonville, Ill. (18). Born Dec. 19, 1806. Died April 29, 1877.
- Agassiz, Louis, Cambridge, Mass. (1). Born May 28, 1807. Died Dec. 14, 1873.
- Ainsworth, J. G., Barry, Mass. (14).
- Alexander, Stephen, Princeton, N. J. (1). Born Sept. 1, 1806. Died June 25, 1883.
- Allen, Thomas, St. Louis, Mo. (27). Died April 8, 1882.
- Allen, Zachariah, Providence, R. I. (1). Died March 17, 1882.
- Allston, R. F. W., Georgetown, S. C. (3). Born April 21, 1801. Died April 7, 1864.
- Alvord, Benjamin, Washington, D. C. (17). Died Oct. 16, 1884, at the age of 71.
- Ames, M. P., Springfield, Mass. (1). Born in 1803. Died April 23, 1847.
- Andrews, Ebenezer B., Lancaster, Ohio (7). Died Aug. 21, 1880, aged 59.
- Anthony, Charles H., Albany, N. Y. (6). Died in 1874.
- Appleton, Nathan, Boston, Mass. (1). Born Oct. 6, 1779. Died July 14, 1861.
- Armstrong, John W., Fredonia, N. Y. (24).
- Atwater, Mrs. S. T., Chicago, Ill. (17). Born Aug. 8, 1812. Died April 11, 1878.
- Aufrecht, Louis, Cincinnati, Ohio (30).
- Bache, Alexander D., Washington, D. C. (1). Born July 19, 1806. Died Feb. 17, 1867.
- Bache, Franklin, Philadelphia, Pa. (1). Born Oct. 25, 1792. Died March 19, 1864.
- Bailey, Jacob W., West Point, N. Y. (1). Born April 29, 1811. Died Feb. 26, 1857.
- Bardwell, F. W., Lawrence, Kan. (13). Died in 1878.
- Barnard, John G., New York, N. Y. (14). Died May 14, 1882.
- Barrett, Moses, Milwaukee, Wis. (21). Died in 1873.
- Barry, Redmond, Melbourne, Australia (25).

- Beck, C. F., Philadelphia, Pa. (1).
 Beck, Lewis C., New Brunswick, N. J. (1). Born Oct. 4, 1798. Died April 21, 1853. [1855.]
 Beck, T. Romeyn, Albany, N. Y. (1). Born Aug. 11, 1791. Died Nov. 19,
 Beckwith, Henry C., Coleman's Station, N. Y. (29). Died July 12, 1885.
 Belfrage, G. W., Clifton, Texas (29). Died Dec. 7, 1882.
 Belt, Thomas, London, Eng. (27). Died Sept. 8, 1878.
 Benedict, George W., Burlington, Vt. (16). Born Jan. 11, 1796. Died in 1871.
 Bicknell, Edwin, Boston, Mass. (18). Born in 1830. Died March 19, 1877.
 Binney, Amos, Boston, Mass. (1). Born Oct. 18, 1803. Died Feb. 18, 1847.
 Binney, John, Boston, Mass. (3).
 Blackie, Geo. S., Nashville, Tenn. (26).
 Blair, Henry W., Washington, D. C., (26). Died Dec. 15, 1884.
 Blake, Homer C., New York, N. Y. (28). Born Feb. 1, 1822.
 Blanding, William, ———, R. I. (1).
 Blatchford, Thomas W., Troy, N. Y. (6).
 Blatchley, Miss S. L., New Haven, Conn. (19). Died March 13, 1873.
 Boadle, John, Haddonfield, N. J. (20). Born in 1805. Died in July, 1878.
 Bomford, George, Washington, D. C. (1). Born 1780. Died March 25, 1848.
 Bowron, James, South Pittsburg, Tenn. (26). Died in Dec., 1877.
 Bradley, Leverette, Jersey City, N. J. (15). Died in 1875.
 Braithwaite, Jos., Chambly, C. W. (11).
 Briggs, Albert D., Springfield, Mass. (13). Died Feb. 20, 1881.
 Briggs, Robert, Philadelphia, Pa. (29). Born May 18, 1822. Died July 24, 1882.
 Brigham, Charles H., Ann Arbor, Mich. (17). Born July 27, 1820. Died in Jan., 1879.
 Brown, Andrew, Natchez, Miss. (1).
 Brown, Horace, Salem, Mass. (27). Died in July, 1883.
 Bull, John, Washington, D. C. (31). Born Aug. 1, 1819. Died June 9, 1884.
 Burbank, L. S., Woburn, Mass. (18).
 Burnap, G. W., Baltimore, Md. (12). Born Nov. 30, 1802. Died Sept. 8, 1859.
 Burnett, Waldo I., Boston, Mass. (1). Died July 1, 1854, aged 27.
 Butler, Thomas B., Norwalk, Conn. (10). Born Aug. 22, 1806. Died June 8, 1873.
 Cairns, F. A., New York, N. Y. (27). Died in 1879.
 Campbell, Mrs. Mary H., Crawfordsville, Ind. (22). Died Feb. 27, 1882.
 Carpenter, Thornton, Camden, S. C. (7).
 Carpenter, William M., New Orleans, La. (1).
 Case, Leonard, Cleveland, Ohio (15). Born June 27, 1820. Died Jan. 5, 1880.

- Case, William, Cleveland, Ohio (6).
- Caswell, Alexis, Providence, R. I. (2). Born Jan. 29, 1799. Died Jan. 8, 1877.
- Chadbourne, Paul Ansel, Amherst, Mass. (10). Born Oct. 21, 1823. Died Feb. 23, 1883.
- Chapman, N., Philadelphia, Pa. (1). Born May 28, 1780. Died July 1, 1853.
- Chase, Stephen, Hanover, N. H. (2). Born in 1813. Died Aug. 5, 1851.
- Chauvenet, William, St. Louis, Mo. (1). Born May 24, 1819. Died Dec. 13, 1870.
- Cheesman, Louis M., Hartford, Conn. (32). Died in Jan. 1885, aged 27 years.
- Cheney, Miss Margaret S., Jamaica Plain, Mass. (29).
- Clapp, Asahel, New Albany, Ind. (1). Born Oct. 5, 1792. Died Dec. 15, 1862.
- Clark, Henry James, Cambridge, Mass. (13). Died July 1, 1873, aged 47.
- Clark, Joseph, Cincinnati, Ohio (5).
- Clarke, A. B., Holyoke, Mass. (13).
- Cleaveland, C. H., Cincinnati, Ohio (9).
- Cleveland, A. B., Cambridge, Mass. (2).
- Coffin, James H., Easton, Pa. (1). Born Sept. 6, 1806. Died Feb. 6, 1873.
- Cole, Thomas, Salem, Mass. (1). Born Dec. 24, 1779. Died June 24, 1852.
- Coleman, Henry, Boston, Mass. (1).
- Collins, Frederick, Washington, D. C. (28). Born Dec. 5, 1842. Died Oct. 27, 1881.
- Conrad, Timothy Abbott, Philadelphia, Pa. (1). Born in August, 1803. Died August 9, 1877.
- Cooke, Caleb, Salem, Mass. (18). Born Feb. 15, 1838. Died June 5, 1880.
- Cooper, William, Hoboken, N. J. (9). Died in 1864.
- Copes, Joseph S., New Orleans, La. (11).
- Corning, Erastus, Albany, N. Y. (6). Born Dec. 14, 1794. Died April 9, 1872.
- Couper, James Hamilton, Darien, Ga. (1). Born March 5, 1794. Died July 3, 1866.
- Cramp, J. M., Wolfville, N. S. (11). Born July 25, 1796. Died Dec. 6, 1881.
- Crehore, John D., Cleveland, Ohio (24).
- Crocker, Charles F., Lawrence, Mass. (22). Died in July, 1881.
- Crosby, Alpheus, Salem, Mass. (10). Born Oct. 13, 1810. Died Apr. 17, 1874.
- Crosby, Thomas R., Hanover, N. H. (18). Born Oct. 22, 1816. Died March 1, 1872. [1871.]
- Crowell, Edwin, Albany, N. Y. (6). Born in May, 1797. Died June 13, 1885.
- Crow, Wayman, St. Louis, Mo. (27). Died 1885.
- Curry, W. F., Geneva, N. Y. (11).
- Curtis, Josiah, Washington, D. C. (18). Died Aug. 1, 1883.
- Dalrymple, E. A., Baltimore, Md. (11). Died Oct. 30, 1881.

- Dayton, Edwin A., Madrid, N. Y. (7). Born in 1827. Died June 24, 1873.
Dean, Amos, Albany, N. Y. (6). Born Jan. 16, 1803. Died Jan. 26, 1868.
Dearborn, George H. A. S., Roxbury, Mass. (1).
Dekay, James E., New York, N. Y. (1). Born in 1792. Died Nov. 21, 1851.
DeLaski, John, Carver's Harbor, Me. (18).
Dewey, Chester, Rochester, N. Y. (1). Born Oct. 25, 1781. Died Dec. 15, 1867.
Dexter, G. M., Boston, Mass. (11).
Dillingham, W. A. P., Augusta, Me. (17).
Dimmick, L. N., Santa Barbara, Cal. (29). Died May 31, 1884.
Doggett, Mrs. Kate N., Chicago, Ill. (17). Died March 12, 1884.
Doggett, Wm. E., Chicago, Ill. (17). Born Nov. 20, 1820. Died in 1876.
Doolittle, L., Lenoxville, C. E. (11). Died in 1862.
Dorr, E. P., Buffalo, N. Y. (15). Died March 28, 1881.
Draper, Henry, New York, N. Y. (28).
Ducatel, J. T., Baltimore, Md. (1).
Duffield, George, Detroit, Mich. (10). Born July 4, 1794. Died June 26, 1869.
Dumont, A. H., Newport, R. I. (14).
Duncan, Lucius C., New Orleans, La. (10). Died Aug. 9, 1855, aged 54.
Dunn, R. P., Providence, R. I. (14).
Easton, Norman, Fall River, Mass. (14). Died Dec. 21, 1872.
Eaton, James H., Beloit, Wis. (17). Died Jan. 5, 1877.
Elsberg, Louis, New York, N. Y. (23). Died Feb. 19, 1885, aged 48 years.
Elwyn, Alfred L., Philadelphia, Pa. (1). Died March 15, 1884.
Ely, Charles Arthur, Elyria, Ohio (4).
Emerson, Geo. B., Boston, Mass. (1). Born Sept. 12, 1797. Died March 4, 1881.
Emmons, Ebenezer, Williamstown, Mass. (1). Born May 16, 1799. Died October 1, 1863.
Engelmann, George, St. Louis, Mo. (1). Born Feb. 2, 1809. Died Feb. 4, 1884.
Engstrom, A. B., Burlington, N. J. (1).
Eustis, Henry L., Cambridge, Mass. (2). Born Feb. 1, 1819. Died Jan. 11, 1885.
Everett, Edward, Boston, Mass. (2). Born April 11, 1794. Died Jan. 15, 1865.
Ewing, Thomas, Lancaster, Ohio (5). Born Dec. 28, 1789. Died Oct. 26, 1871.
Faries, R. J., Wauwatosa, Wis. (21). Died May 31, 1878.
Farquharson, Robert James, Des Moines, Iowa. (24). Died Sept. 6, 1884.
Ferris, Isaac, New York, N. Y. (6). Born Oct. 9, 1798. Died June 16, 1873.
Feuchtwanger, Lewis, New York, N. Y. (11). Died June 25, 1876.
Fillmore, Millard, Buffalo, N. Y. (7). Born Jan. 7, 1800. Died March 8, 1874.
Fisher, Mark, Trenton, N. J. (10). [1874.]

- Fitch, Alexander, Hartford, Conn. (1). Born March 25, 1799. Died Jan. 20, 1859.
- Fitch, O. H., Ashtabula, Ohio (7). Died Sept. 17, 1882, in his 80th year.
- Forbush, E. B., Buffalo, N. Y. (15).
- Force, Peter, Washington, D. C. (4). Born Nov. 26, 1790. Died Jan. 23, 1868.
- Ford, A. C., Nashville, Tenn. (26).
- Forshey, Caleb G., New Orleans, La. (21). Died in Aug., 1881.
- Foster, John W., Chicago, Ill. (1). Born March 4, 1815. Died June 29, 1873.
- Foucon, Felix, Madison, Wis. (18).
- Fowle, Wm. B., Boston, Mass. (1). Born Oct. 17, 1795. Died Feb. 6, 1865.
- Fox, Charles, Grosse Ile, Mich. (7).
- Frazer, John F., Philadelphia, Pa. (1). Born July 8, 1812. Died Oct. 12, 1872.
- French, J. W., West Point, N. Y. (11).
- Garber, A. P., Columbia, Pa. (29). Died Aug. 26, 1881.
- Gavit, John E., New York, N. Y. (1).
- Gay, Martin, Boston, Mass. (1). Died Jan. 12, 1850, aged 46.
- Gibbon, J. H., Charlotte, N. C. (3).
- Gillespie, W. M., Schenectady, N. Y. (10). Born in 1816. Died Jan'y 1, 1868.
- Gilmor, Robert, Baltimore, Md. (1).
- Glazier, W. W., Key West, Fla. (29). Died Dec. 11, 1880.
- Goldmark, J., New York, N. Y. (29). Died in April, 1882.
- Gould, Augustus A., Boston, Mass. (11). Born April 23, 1805. Died Sept. 15, 1866.
- Gould, B. A., Boston, Mass. (2). Born June 15, 1787. Died Oct. 24, 1859.
- Graham, James D., Washington, D. C. (1). Born in 1799. Died Dec. 28, 1865.
- Gray, Alonzo, Brooklyn, N. Y. (13). Born in 1808. Died March 10, 1860.
- Gray, James H., Springfield, Mass. (6).
- Greene, Benjamin D., Boston, Mass. (1). Died Oct. 14, 1862, aged 68.
- Greene, Everett W., Madison, N. J. (10). Died in 1864.
- Greene, Samuel, Woonsocket, R. I. (9). Died in 1868.
- Greer, James, Dayton, Ohio (20). Died in Feb., 1874.
- Griffith, Robert E., Philadelphia, Pa. (1).
- Griswold, John A., Troy, N. Y. (19). Born in 1822. Died Oct. 31, 1872.
- Guest, William E., Ogdensburg, N. Y. (6).
- Guyot, Arnold, Princeton, N. J. (1). Born Sept. 5, 1809. Died Feb. 8, 1884.
- Hackley, Charles W., New York, N. Y. (4). Born March 9, 1809. Died January 10, 1861.
- Hadley, George, Buffalo, N. Y. (6). Born June, 1813. Died Oct. 16, 1877.

- Haldeman, S. S., Chickies, Pa. (1). Died Sept. 10, 1880, aged 68.
- Hale, Enoch, Boston, Mass. (1). Born Jan. 29, 1790. Died Nov. 12, 1848.
- Hance, Ebenezer, Fallsington P. O., Pa. (7). Died in 1876.
- Hare, Robert, Philadelphia, Pa. (1). Born Jan. 17, 1781. Died May 15, 1858.
- Harlan, Joseph G., Haverford, Pa. (8).
- Harlan, Richard, Philadelphia, Pa. (1).
- Harris, Thaddeus W., Cambridge, Mass. (1). Born Nov. 12, 1795. Died Jan. 16, 1856.
- Harrison, A. M., Plymouth, Mass. (29).
- Harrison, Jos., jr., Philadelphia, Pa. (12).
- Hart, Simeon, Farmington, Conn. (1). Died April 20, 1853, aged 57.
- Hartt, Charles F., Ithaca, N. Y. (18). Born in 1840. Died March 18, 1878.
- Haven, Joseph, Chicago, Ill. (17). Born Jan. 4, 1816. Died May 23, 1874.
- Hawes, George W., Washington, D. C. (23). Born Dec. 31, 1848. Died June 22, 1882.
- Hayden, H. H., Baltimore, Md. (1).
- Hayes, George E., Buffalo, N. Y. (15).
- Hayward, James, Boston, Mass. (1). Died July 27, 1866, aged 80.
- Hempstead, G. S. B., Portsmouth, Ohio (29). Died July 9, 1883, in his 89th year.
- Henry, Jos., Washington, D. C. (1). Born Dec. 17, 1797. Died May 13, 1878.
- Hickox, S. V. R., Chicago, Ill. (17). Died in 1872.
- Hilgard, Theo. C., St. Louis, Mo. (17). Born Feb. 28, 1828. Died Mch. 5, 1875. [1884.
- Hill, Walter N., Chester, Pa. (29). Born April 15, 1846. Died March 29,
- Hincks, William, Toronto, C. W. (11).
- Hitchcock, Edward, Amherst, Mass. (1). Born May 24, 1793. Died Feb. 27, 1864.
- Hodgson, W. B., Savannah, Ga. (10). Born 1815.
- Holbrook, John E., Charleston, S. C. (1). Born Dec. 31, 1796. Died Sept. 8, 1871.
- Hopkins, Albert, Williamstown, Mass. (19). Born July 14, 1807. Died May 25, 1872.
- Hopkins, James G., Ogdensburg, N. Y. (10). Died in 1860.
- Hopkins, T. O., Williamsville, N. Y. (10). Died in 1866.
- Hopkins, Wm., Lima, N. Y. (5.) Died in March, 1867.
- Horton, C. V. R., Chaumont, N. Y. (10). Died in 1862.
- Horton, William, Craigville, N. Y. (1).
- Hosford, Benj. F., Haverhill, Mass. (13). Died in 1864.
- Hough, Franklin B., Lowville, N. Y. (4). Born 1822. Died June 11, 1885.
- Houghton, Douglas, Detroit, Mich. (1). Born Sept. 21, 1809. Died Oct. 13, 1845.
- Hovey, Edmund O., Crawfordsville, Ind. (20). Born July 15, 1801. Died March 10, 1877.
- Howland, Theodore, Buffalo, N. Y. (15).
- Hubbert, James, Richmond, Province of Quebec (16). Died in 1868.

DECEASED MEMBERS.

lxxxix

Hunt, Edward B., Washington, D. C. (2). Born June 15, 1822. Died Oct. 2, 1863.

Hunt, Freeman, New York, N. Y. (11). Born March 21, 1804. Died March 2, 1858.

Ives, Moses B., Providence, R. I. (9). Died in 1857.

Ives, Thomas P., Providence, R. I. (10).

Jackson, Charles T., Boston, Mass. (1). Born June 21, 1805. Died Aug. 29, 1880.

James, Thomas Potts, Cambridge, Mass. (22). Born Sept. 1, 1803. Died Feb. 22, 1882.

Johnson, Walter R., Washington, D. C. (1). Born June 21, 1794. Died April 26, 1852.

Johnson, William Schuyler, Washington, D. C. (31). Born Sept. 20, 1859. Died Oct. 6, 1883.

Jones, Catesby A. R., Washington, D. C. (8).

Jones, Henry A., Portland, Me. (29). Died Sept. 3, 1883.

Jones, James H., Boston, Mass. (28).

Kedzie, W. K., Oberlin, Ohio (25).

Keely, George W., Waterville, Me. (1). Died in 1878.

Keep, N. C., Boston, Mass. (13). Died in March, 1875.

Kennicott, Robert, West Northfield, Ill. (12). Born Nov. 13, 1835. Died in 1866.

King, Mitchell, Charleston, S. C. (3). Born June 8, 1783. Died in 1862.

Kite, Thomas, Cincinnati, Ohio (5). Died Feb. 6, 1884.

Klippart, John H., Columbus, Ohio (17). Died October, 1878.

Knickerbocker, Charles, Chicago, Ill. (17). Died in 1873.

Knight, J. B., Philadelphia, Pa. (21). Died March 10, 1879.

Lacklan, R., Cincinnati, Ohio (11).

Lapham, Increase A., Milwaukee, Wis. (3). Born Mch. 7, 1811. Died Sept. 14, 1875.

LaRoche, R., Philadelphia, Pa. (12).

Lasel, Edward, Williamstown, Mass. (1). Born Jan. 21, 1809. Died in 1852.

Lawford, Frederick, Montreal, Canada (11). Died in 1866.

Le Conte, John L., Philadelphia, Pa. (1). Died Nov. 15, 1883.

Lederer, Baron von, Washington, D. C. (1).

Lieber, Oscar M., Columbia, S. C. (8). Born Sept. 8, 1830. Died June 27, 1862.

Lincklaen, Ledyard, Cazenovia, N. Y. (1).

Linsley, James H., Stafford, Conn. (1). Born May 5, 1787. Died Dec. 26, 1843.

- Lockwood, Moses B., Providence, R. I. (9). Died in 1872.
- Logan, William E., Montreal, Canada (1). Born April 23, 1798. Died June 22, 1875.
- Loosey, Charles F., New York, N. Y. (12).
- Lothrop, Joshua R., Buffalo, N. Y. (15).
- Lyon, Sidney S., Jeffersonville, Ind. (20). Born Aug. 4, 1808. Died June 24, 1872.
- Maack, G. A., Cambridge, Mass. (18). Died in Aug., 1873.
- Mahan, Dennis H., West Point, N. Y. (9). Born April 2, 1802. Died Sept. 16, 1871.
- Marsh, Dexter, Greenfield, Mass. (1).
- Marsh, James E., Roxbury, Mass. (10).
- Martin, B. N., New York, N. Y. (23). Died Dec. 26, 1883.
- Mather, William W., Columbus, Ohio (1). Born May 24, 1804. Died Feb. 27, 1859.
- Maude, John B., St. Louis, Mo. (27). Died in April, 1879.
- Maupin, S., Charlottesville, Va. (10).
- M'Conihe, Isaac, Troy, N. Y. (5).
- McFadden, Thomas, Westerville, Ohio (30). Born Nov. 9, 1825. Died Nov. 9, 1883.
- McMahon, Mathew, Albany, N. Y. (11).
- Meade, George G., Philadelphia, Pa. (15). Born Dec. 30, 1815. Died Nov. 6, 1872.
- Meek, F. B., Washington, D. C. (6). Born December 10, 1817. Died December 21, 1876.
- Meigs, James Aitken, Philadelphia, Pa. (12). Born July 30, 1829. Died Nov. 9, 1879.
- Minifie, William, Baltimore, Md. (12). Born in 1805. Died Oct. 24, 1880.
- Mitchel, O. M., Cincinnati, Ohio (3). Born Aug. 28, 1810. Died Oct. 30, 1862.
- Mitchell, William, Poughkeepsie, N. Y. (2). Died April 2, 1869, aged 76.
- Mitchell, Wm. H., Florence, Ala. (17).
- Morgan, Lewis H., Rochester, N. Y. (10). Born Nov. 21, 1818. Died Dec. 17, 1881.
- Morgan, Mrs. Mary E., Rochester, N. Y. (31).
- Morris, John B., Nashville, Tenn. (26).
- Morton, Samuel G., Philadelphia, Pa. (1). Born Jan. 26, 1799. Died May 15, 1851.
- Mudge, Benjamin F., Manhattan, Kansas (25). Born Aug. 11, 1817. Died Nov. 21, 1879, aged 62.
- Monroe, Nathan, Bradford, Mass. (6). Born May 16, 1804. Died July 8, 1866.
- Monroe, William, Concord, Mass. (18). Died April 27, 1877.
- Mussey, William H., Cincinnati, Ohio (30). Born Sept. 13, 1818. Died Aug. 1, 1882.

- Newland, John, Saratoga Springs, N. Y. (28). Died Jan. 18, 1880.
- Newton, E. H., Cambridge, N. Y. (1).
- Nichols, Charles A., Providence, R. I. (17). Born Jan. 4, 1826. Died Oct. 20, 1877.
- Nicholson, Thomas, New Orleans, La. (21).
- Nicollett, Jean N., Washington, D. C. (1). Born July 24, 1786. Died Sept. 11, 1843.
- Norton, John P., New Haven, Conn. (1). Born in July, 1822. Died Sept. 5, 1852.
- Norton, W. A., New Haven, Conn. (6).
- Noyes, J. O., New Orleans, La. (21).
- Nutt, Cyrus, Bloomington, Ind. (20). Died in 1875.
- Oakes, Wm., Ipswich, Mass. (1). Born July 1, 1799. Died July 31, 1848.
- Ogden, Robert W., New Orleans, La. (21). Died March 24, 1878.
- Ogden, William B., High Bridge, Westchester Co., N. Y. (17). Born in 1805. Died Aug. 3, 1877.
- Olmsted, Alexander F., New Haven, Conn. (4). Born Dec. 20, 1822. Died May 5, 1853.
- Olmsted, Denison, New Haven, Conn. (1). Born June 18, 1791. Died May 13, 1859.
- Olmsted, Denison, jr., New Haven, Conn. (1). Born Feb. 16, 1824. Died Aug. 15, 1846.
- Orton, James, Poughkeepsie, N. Y. (18). Died Sept. 24, 1877.
- Osbun, Isaac J., Salem, Mass. (29).
- Otis, George Alexander, Washington, D. C. (10). Born Nov. 12, 1830. Died Feb. 23, 1881.
- Packer, Harry E., Mauch Chunk, Pa. (30). Died Feb. 1, 1884.
- Painter, Jacob, Lima, Pa. (23). Died in 1876.
- Painter, Minshall, Lima, Pa. (7).
- Parker, Wilbur F., West Meriden, Conn. (23). Died in 1876.
- Parkman, Samuel, Boston, Mass. (1). Died Dec. 15, 1854, aged 38.
- Payn, Charles H., Saratoga Springs, N. Y. (28). Born May 16, 1814. Died Dec. 20, 1881.
- Peirce, B. O., Beverly, Mass. (18). Died Nov. 12, 1883, aged 71 years.
- Peirce, Benjamin, Cambridge, Mass. (1). Born April 4, 1809. Died Oct. 6, 1880.
- Perkins, George R., Utica, N. Y. (1). Born May 3, 1812. Died Aug. 22, 1876.
- Perkins, Henry C., Newburyport, Mass. (18). Born Nov. 13, 1804. Died Feb. 2, 1873.
- Perry, John B., Cambridge, Mass. (16). Died Oct. 3, 1872, aged 52.
- Perry, M. C., New York, N. Y. (10).

- Phelps, Mrs. Almira Hart Lincoln, Baltimore, Md. (13). Died July 15, 1884, in her 91st year.
- Phillips, John C., Boston, Mass. (29). Died March 1, 1885, aged 46 yrs. 9 mos.
- Piggot, A. Snowden, Baltimore, Md. (10).
- Plumb, Ovid, Salisbury, Conn. (9).
- Pope, Charles A., St. Louis, Mo. (12). Born May 15, 1818. Died July 6, 1870.
- Porter, John A., New Haven, Conn. (14). Born March 15, 1822. Died Aug. 25, 1866.
- Potter, Stephen H., Hamilton, Ohio (30). Born Nov. 10, 1812. Died Dec. 9, 1883.
- Pourtalès, Louis François de, Cambridge, Mass. (1). Born in 1822. Died July 18, 1880.
- Pruyn, John V. L., Albany, N. Y. (1). Born June 22, 1811. Died Nov. 21, 1877.
- Pugh, Evan, Centre Co., Pa. (14).
- Pulsifer, Sidney, Philadelphia, Pa. (21). Died March 24, 1884.
- Putnam, Mrs. F. W., Cambridge, Mass. (19). Born Dec. 29, 1838. Died March 10, 1879.
- Putnam, J. Duncan, Davenport, Iowa (27). Born Oct. 18, 1855. Died Dec. 10, 1881.
- Read, Ezra, Terre Haute, Ind. (20). Died in 1877.
- Redfield, William C., New York (1). Born March 26, 1789. Died Feb. 12, 1857.
- Resor, Jacob, Cincinnati, Ohio (8). Died in 1871.
- Robb, James, Fredericton, N. B. (4).
- Robinson, Coleman T., Buffalo, N. Y. (15).
- Rockwell, John A., Norwich, Conn. (10). Born August 27, 1803. Died February 10, 1861.
- Rogers, Henry D., Glasgow, Scotland (1). Born 1809. Died May 29, 1866.
- Rogers, James B., Philadelphia, Pa. (1). Born February 22, 1803. Died June 15, 1852.
- Rogers, Robert E., Philadelphia, Pa. (18). Died Sept. 7, 1884.
- Rogers, William Barton, Boston, Mass. (1). Born Dec. 7, 1804. Died May 30, 1882.
- Root, Elihu, Amherst, Mass. (25). Born Sept. 14, 1845.
- Sager, Abram, Ann Arbor, Mich. (6). Born December 22, 1810. Died August 6, 1877.
- Sanders, Benjamin D., Wellsbürg, W. Va. (19).
- Schaeffer, Geo. C., Washington, D. C. (1). Died in 1873.
- Schley, William, New York, N. Y. (28). Died in 1882.
- Scott, Joseph, Dunham, C. E. (11). Died in 1865.
- Seaman, Ezra C. (20).

- Senter, Harvey S., Aledo, Ill. (20). Died in 1875.
- Seward, William H., Auburn, N. Y. (1). Born May 16, 1801. Died Oct. 10, 1872.
- Sheppard, William, Drummondville, Province of Quebec, Can. (11). Born in 1783. Died in 1867.
- Sherwin, Thomas, Dedham, Mass. (11). Born March 26, 1799. Died July 23, 1869.
- Silliman, Benjamin, New Haven, Conn. (1). Born August 8, 1779. Died November 22, 1864.
- Silliman, Benjamin, New Haven, Conn. (1). Born Dec. 4, 1816. Died Jan. 14, 1885.
- Skinner, John B., Buffalo, N. Y. (15). Died in 1871.
- Slack, J. H., Philadelphia, Pa. (12).
- Smith, Charles A., St. Louis, Mo. (27). Died in 1884.
- Smith, David P., Springfield, Mass. (29). Born Oct. 1, 1830. Died Dec. 26, 1880.
- Smith, J. Lawrence, Louisville, Ky. (1). Born Dec. 16, 1818. Died Oct. 12, 1883.
- Smith, J. V., Cincinnati, Ohio (5).
- Smith, James Y., Providence, R. I. (9). Born September 15, 1809. Died in 1876.
- Smith, Lyndon A., Newark, N. J. (9). Born November 11, 1795. Died December 15, 1865.
- Snell, Ebenezer S., Amherst, Mass. (2). Born October 7, 1801. Died in September, 1877.
- Sparks, Jared, Cambridge, Mass. (2). Born May 10, 1789. Died March 14, 1866.
- Spinzig, Charles, St. Louis, Mo. (27). Died Jan. 22, 1882.
- Stearns, Josiah A., Boston, Mass. (29).
- Stimpson, William, Chicago, Ill. (12). Died May 26, 1872.
- Stone, Samuel, Chicago, Ill. (17). Born Dec. 6, 1798. Died May 4, 1876.
- St. John, Joseph S., Albany, N. Y. (28). Died Nov. 23, 1882.
- Sullivant, William S., Columbus, Ohio (7). Born Jan. 15, 1803. Died April 30, 1873.
- Swain, James, Fort Dodge, Iowa (21). Born in 1816. Died in 1877.
- Tallmadge, James, New York, N. Y. (1). Born Jan. 20, 1778. Died Oct. 3, 1853.
- Taylor, Arthur F., Cleveland, Ohio (29). Born Dec. 10, 1853. Died June 28, 1883.
- Taylor, Richard C., Philadelphia, Pa. (1). Born January 18, 1789. Died November 26, 1851.
- Tenney, Sanborn, Williamstown, Mass. (17). Born in January, 1827. Died July 11, 1877.
- Teschemacher, J. E., Boston, Mass. (1). Died Nov. 9, 1853, aged 63.
- Thompson, A. Remsen, New York, N. Y. (1). Died in Oct., 1879.
- Thompson, Alexander, Aurora, N. Y. (1).

- Thompson, Zadock, Burlington, Vt. (1). Born May 23, 1796. Died Jan. 19, 1856.
- Thurber, Isaac, Providence, R. I. (9).
- Tillman, Samuel D., Jersey City, N. J. (15). Died in 1875.
- Tobin, Thomas W., Louisville, Ky. (30). Died Aug. 4, 1883.
- Tolderoy, James B., Fredericton, N. B. (11).
- Torrey, John, New York, N. Y. (1). Born Aug. 15, 1796. Died March 10, 1873.
- Torrey, Joseph, Burlington, Vt. (2). Born Feb. 2, 1797. Died Nov. 26, 1867.
- Totten, Joseph G., Washington, D. C. (1). Born August 23, 1788. Died April 22, 1864.
- Townsend, Howard, Albany, N. Y. (10). Died in 1867.
- Townsend, John K., Philadelphia, Pa. (1).
- Townsend, Robert, Albany, N. Y. (9). Died in 1866.
- Troost, Gerard, Nashville, Tenn. (1). Born March 15, 1776. Died Aug. 14, 1850.
- Tuomey, Michael, Tuscaloosa, Ala. (1). Born September 29, 1805. Died March 20, 1857.
- Tyler, Edward R., New Haven, Conn. (1). Died Sept. 28, 1848.
- Vancleve, John W., Dayton, Ohio (1).
- Vanuxem, Lardner, Bristol, Pa. (1).
- Vaux, William S., Philadelphia, Pa. (1). Born May 19, 1811. Died May 5, 1882.
- Wadsworth, James S., Genesee, N. Y. (2). Born October 30, 1807. Died May 8, 1864.
- Wagner, Tobias, Philadelphia, Pa. (9).
- Walker, Joseph, Oxford, N. Y. (10).
- Walker, Sears C., Washington, D. C. (1). Born March 28, 1805. Died January 30, 1853.
- Walker, Timothy, Cincinnati, Ohio (4). Born Dec. 1, 1802. Died Jan. 15, 1856.
- Walsh, Benjamin D., Rock Island, Ill. (17).
- Wanzer, Ira, Brookfield, Conn. (18). Born April 17, 1796. Died March 5, 1879.
- Warren, Gouverneur Kemble, Newport, R. I. (12). Died Aug. 8, 1882, in his 64th year.
- Warren, John C., Boston, Mass. (1). Born Aug. 1, 1778. Died May 4, 1856.
- Watertown, Charles, Wakefield, Eng. (1).
- Watkins, Samuel, Nashville, Tenn. (26).
- Watson, J. Craig, Ann Arbor, Mich. (13). Born Jan. 28, 1838. Died Nov. 23, 1880.
- Webster, Horace B., Albany, N. Y. (1). Died Dec. 8, 1843.

- Webster, J. W., Cambridge, Mass. (1). Died Aug. 30, 1850, aged 57.
Webster, M. H., Albany, N. Y. (1).
Weed, Monroe, Wyoming, N. Y. (6). Died in 1867.
Welch, Mrs. G. O., Lynn, Mass. (21). Died in June, 1882.
Weyman, George W., Pittsburg, Pa. (6). Born April, 1832. Died July 16, 1864.
Wheatland, Richard H., Salem, Mass. (13). Born July 6, 1830. Died Dec. 21, 1863.
Wheatley, Charles M., Phoenixville, Pa. (1). Died May 6, 1882.
Wheeler, Arthur W., Baltimore, Md. (29). Born in March, 1859. Died Jan. 6, 1881.
White, Samuel S., Philadelphia, Pa. (23). Died Dec. 30, 1879.
Whiting, Lewis E., Saratoga Springs, N. Y. (28). Born March 7, 1815. Died Aug. 2, 1882.
Whitman, Wm. E., Philadelphia, Pa. (23). Died in 1875.
Whitney, Asa, Philadelphia, Pa. (1). Born Dec. 1, 1791. Died June 4, 1874.
Whittlesey, Charles C., St. Louis, Mo. (11). Died in 1872.
Willard, Emma, Troy, N. Y. (15). Born Feb. 23, 1787. Died April 15, 1870.
Williamson, R. S., San Francisco, Cal. (12).
Wilson, W. C., Carlisle, Pa. (12).
Winlock, Joseph, Cambridge, Mass. (5). Born Feb. 6, 1826. Died June 11, 1875.
Woodbury, Levi, Portsmouth, N. H. (1). Born Dec. 22, 1789. Died Sept. 4, 1851.
Woodman, John S., Hanover, N. H. (11). Born in 1819. Died May 15, 1871.
Woodward, J. J., Washington, D. C. (28).
Wright, John, Troy, N. Y. (1).
Wyman, Jeffries, Cambridge, Mass. (1). Born Aug. 11, 1814. Died Sept. 4, 1874.
- Yarnall, M., Washington, D. C. (26). Born in 1817. Died Jan. 27, 1879.
Young, Ira, Hanover, N. H. (1). Died Sept. 14, 1858, aged 57.

THE LIBRARY OF THE
FEB 4 1933
UNIVERSITY OF ILLINOIS



PUBLICATIONS

FOR SALE BY THE

American Association for the Advancement of Science.

TRANSACTIONS OF THE ASSOCIATION OF AMERICAN GEOLOGISTS AND NATURALISTS, 1st, 2nd and 3d Meetings, 1840-1842, in one volume. 8vo, cloth, 544 pages, 21 plates, 1843, \$3.00. Half Turkey morocco, \$4.50.

MEMOIRS OF THE AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE. 4to. No. 1, *Fossil Butterflies*. By S. H. Scudder. 100 pages, 3 plates, 1875. Paper covers, \$2.00. Half Turkey morocco, \$3.50.

PRESIDENTIAL ADDRESSES, 8vo, pamphlets. Copies of such as can be supplied are furnished at 25 cents each.

REPORT OF THE COMMITTEE ON ZOOLOGICAL NOMENCLATURE, 8vo. pp. 56. Nashville Meeting, 1877. 25 cents.

PROCEEDINGS OF THE AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE. 8vo, paper. With numerous illustrations.

Vol. I.	Philadelphia Meeting, 1848, pages 156, published 1849.
II.	Cambridge " 1849, " 479, " 1850.
III.	Charleston " 1850, " 239, " 1850.
IV.	New Haven " 1850, " 449, " 1851.
V.	Cincinnati " 1851, " 287, " 1851.
VI.	Albany " 1851, " 480, " 1852.
VII.	Cleveland " 1853, " 312, " 1856.
VIII.	Washington " 1854, " 372, " 1855.
IX.	Providence " 1855, " 357, " 1856.
X.	2nd Albany " 1856, " 547, " 1857.
XI.	Montreal " 1857, " 447, " 1858.
XII.	Baltimore " 1858, " 376, " 1859.
XIII.	Springfield " 1859, " 444, " 1860.
XIV.	Newport " 1860, " 328, " 1861.
XV.	Buffalo " 1866, " 174, " 1867.
XVI.	Burlington " 1867, " 218, " 1868.
XVII.	Chicago " 1868, " 410, " 1869.
XVIII.	Salem " 1869, " 352, " 1870.
XIX.	Troy " 1870, " 427, " 1871.
XX.	Indianapolis " 1871, " 491, " 1872.
XXI.	Dubuque " 1872, " 339, " 1873.
XXII.	Portland " 1873, " 669, " 1874.
XXIII.	Hartford " 1874, " 378, " 1875.
XXIV.	Detroit " 1875, " 541, " 1876.
XXV.	2nd Buffalo " 1876, " 424, " 1877.
XXVI.	Nashville " 1877, " 456, " 1878.
XXVII.	St. Louis " 1878, " 424, " 1879.
XXVIII.	Saratoga " 1879, " 636, " 1880.
XXIX.	Boston " 1880, " 875, " 1881.
XXX.	Cincinnati " 1881, " 504, " 1882.
XXXI.	2nd Montreal " 1882, " 743, " 1883.
XXXII.	Minneapolis " 1883, " 598, " 1884.
XXXIII.	Philadelphia " 1884, " 831, " 1885.

Price of the Proceedings \$1.50 a Volume, or to Members ordering ten or more Volumes at one time, \$1.00.

Orders will be received for any of the above volumes of Proceedings, bound in full cloth, at 50 cents extra per volume; or in half Turkey morocco, at \$1.00 extra per volume. Uniform Cloth Covers for the Proceedings, by mail, 30 cents each; or 25 cents by express.

Address:

F. W. PUTNAM, Permanent Secretary,

SALEM, MASS.

506
AMA
1898

FIFTIETH ANNIVERSARY.

CONSTITUTION

LIST OF MEETINGS

OFFICERS

COMMITTEES AND MEMBERS

OF

THE AMERICAN ASSOCIATION

FOR THE

ADVANCEMENT OF SCIENCE,

FOR THE FORTY-SEVENTH MEETING,

HELD AT

BOSTON, MASS.

AUGUST, 1898.

SALEM:

PUBLISHED BY THE PERMANENT SECRETARY.

1898.

FIFTIETH ANNIVERSARY.

CONSTITUTION

LIST OF MEETINGS

OFFICERS

COMMITTEES AND MEMBERS

OF

THE AMERICAN ASSOCIATION

FOR THE

ADVANCEMENT OF SCIENCE,

FOR THE FORTY-SEVENTH MEETING,

HELD AT

BOSTON, MASS.

AUGUST, 1898.

SALEM:

PUBLISHED BY THE PERMANENT SECRETARY.

1898.

EDITED BY
FREDERIC W. PUTNAM,
Permanent Secretary.

The Salem Press Co.
SALEM, MASS.
1898.

536
ANA
1898

OFFICERS
OF THE
BOSTON MEETING.

FIFTIETH ANNIVERSARY.

PRESIDENT.

F. W. PUTNAM, Harvard University, Cambridge, Mass.

VICE PRESIDENTS.

- A. **Mathematics and Astronomy** — E. E. BARNARD, Yerkes Observatory, Williams Bay, Wis.
B. **Physics** — FRANK P. WHITMAN, Adelbert College, Cleveland, Ohio.
C. **Chemistry** — EDGAR F. SMITH, University of Pennsylvania, Philadelphia, Pa.
D. **Mechanical Science and Engineering** — M. E. COOLEY, University of Michigan, Ann Arbor, Mich.
E. **Geology and Geography** — H. L. FAIRCHILD, University of Rochester, Rochester, N. Y.
F. **Zoölogy** — A. S. PACKARD, Brown University, Providence, R. I.
G. **Botany** — W. G. FARLOW, Harvard University, Cambridge, Mass.
H. **Anthropology** — J. MCK. CATTELL, Columbia University, New York, N. Y.
I. **Social and Economic Science** — ARCHIBALD BLUE, Bureau of Mines, Toronto, Ontario, Canada.

PERMANENT SECRETARY.

L. O. HOWARD, U. S. Department of Agriculture, Washington, D. C.

GENERAL SECRETARY.

JAMES McMAHON, Cornell University, Ithaca, N. Y.

[To fill vacancy caused by the death of DAVID S. KELLCOTT, Ohio State University, Columbus, O.]

SECRETARY OF THE COUNCIL.

FREDERICK BEDELL, Cornell University, Ithaca, N. Y.

SECRETARIES OF THE SECTIONS.

- A. **Mathematics and Astronomy** — JAMES McMAHON, Cornell University, Ithaca, N. Y. (*Acting Secretary*)
B. **Physics** — W. S. FRANKLIN, Lehigh University, So. Bethlehem, Pa. (*Acting Secretary*)
C. **Chemistry** — CHARLES BASKERVILLE, University of North Carolina, Chapel Hill, N. C.
D. **Mechanical Science and Engineering** — W. S. ALDRICH, University of West Virginia, Morgantown, W. Va. (JOHN J. FLATHER, Lafayette, Ind., *Acting Secretary* during the absence of Professor ALDRICH.)
E. **Geology and Geography** — WARREN UPHAM, Minnesota Historical Society, St. Paul, Minn.
F. **Zoölogy** — R. T. JACKSON, Harvard University, Cambridge, Mass. (*Acting Secretary*)
G. **Botany** — ERWIN F. SMITH, U. S. Department of Agriculture, Washington, D. C.
H. **Anthropology** — M. H. SAVILLE, American Museum of Natural History, Central Park, New York, N. Y.
I. **Social and Economic Science** — MARCUS BENJAMIN, U. S. National Museum, Washington, D. C.

TREASURER.

R. S. WOODWARD, Columbia University, New York, N. Y.

MEMBERS OF THE COUNCIL
FOR THE
BOSTON MEETING.

FIFTIETH ANNIVERSARY.

Past Presidents.—SIMON NEWCOMB of Washington; O. C. MARSH of New Haven; GEORGE F. BARKER of Philadelphia; GEORGE J. BRUSH of New Haven; J. W. DAWSON of Montreal; C. A. YOUNG of Princeton; J. P. LESLEY of Philadelphia; EDWARD S. MORSE of Salem; SAMUEL P. LANGLEY of Washington; J. W. POWELL of Washington; T. C. MENDENHALL of Worcester; GEORGE L. GOODALE of Cambridge; ALBERT B. PRESCOTT of Ann Arbor; JOSEPH LECONTE of Berkeley; WILLIAM HARKNESS of Washington; DANIEL G. BRINTON of Media; EDWARD W. MORLEY of Cleveland; THEODORE GILL of Washington; WOLCOTT GIBBS of Newport.

Vice Presidents of the Detroit Meeting.—W. W. BEMAN of Ann Arbor; CARL BARUS of Providence; W. P. MASON of Troy; J. GALBRAITH of Toronto; E. W. CLAYPOLE of Akron; L. O. HOWARD of Washington; GEORGE F. ATKINSON of Ithaca; W J MCGEE of Washington; RICHARD T. COLBURN of Elizabeth.

Officers of the Boston Meeting.—F. W. PUTNAM of Cambridge; E. E. BARNARD of Williams Bay; F. P. WHITMAN of Cleveland; E. F. SMITH of Philadelphia; M. E. COOLEY of Ann Arbor; H. L. FAIRCHILD of Rochester; A. S. PACKARD of Providence; W. G. FARLOW of Cambridge; J. MCK. CATTELL of New York; ARCHIBALD BLUE of Toronto; L. O. HOWARD of Washington; JAMES MCMAHON of Ithaca; FREDERICK BEDELL of Ithaca; JAMES MCMAHON of Ithaca, *Acting Secretary* of A; W. S. FRANKLIN of S. Bethlehem, *Acting Secretary* of B; CHARLES BASKERVILLE of Chapel Hill; W. S. ALDRICH of Morgantown; WARREN UPHAM of St. Paul; R. T. JACKSON of Cambridge, *Acting Secretary* of F; E. F. SMITH of Washington; M. H. SAVILLE of New York; MARCUS BENJAMIN of Washington; R. S. WOODWARD of New York.

From the Association at Large—To hold over until successors are elected. A fellow elected from each section.—E. W. HYDE of Cincinnati (A); H. T. EDDY of Cincinnati (B); C. B. DUDLEY of Altoona (C); THOMAS GRAY of Terre Haute (D); W. N. RICE of Middletown (E); F. M. WEBSTER of Wooster (F); W. J. BEAL of Agricultural College, Michigan (G); W. H. HOLMES of Washington (H); MARCUS BENJAMIN of Washington (I).

SPECIAL COMMITTEES OF THE ASSOCIATION.¹

1. *Auditors.*

EMORY MCCLINTOCK, Morristown, and S. C. CHANDLER, Cambridge.

2. *Committee on Indexing Chemical Literature.*

H. CARRINGTON BOLTON, *Chairman*, F. W. CLARKE, A. R. LEEDS, H. W. WILEY, J. W. LANGLEY, A. B. PRESCOTT, ALFRED TUCKERMAN.

3. *Committee on the Association Table in Biological Laboratory at Wood's Hall.*

THE OUTGOING AND INCOMING VICE PRESIDENTS OF SECTIONS F and G, and C. O. WHITMAN, Chicago.

4. *Committee on the Policy of the Association.*

THE PRESIDENT, *Chairman*, THE PERMANENT SECRETARY, THE TREASURER, T. C. MENDENHALL, MANSFIELD MERRIMAN, WM. H. BREWER.

5. *Committee on Standards of Measurements.*

T. C. MENDENHALL, *Chairman*, W. A. ROGERS, E. L. NICHOLS, R. S. WOODWARD, H. A. ROLAND, H. S. CARHART. With power to add to its number.

6. *Committee on Standard Colors and Standard Nomenclature of Colors.*

O. N. ROOD, *Chairman*, W. LECONTE STEVENS, WILLIAM HALLOCK.

7. *Committee on the Association Library.*

ALFRED SPRINGER, *Chairman*, A. W. BUTLER, W. L. DUDLEY, T. H. NORTON, THOMAS FRENCH, JR.

8. *Committee for the study of the White Race in America.*

D. G. BRINTON, J. MCK. CATTELL, W. W. NEWELL, W. J. MCGEE, FRANZ BOAS.

9. *Committee to coöperate with the National Educational Association regarding the Teaching of Science in the Secondary Schools.*

R. S. TARR, H. S. CARHART, A. S. PACKARD, C. F. MABERY, C. E. BESSEY.

10. *To represent the Association as Member of the American Advisory Board on an International Code of Zoölogical Nomenclature.*

A. S. PACKARD.

11. *Committee on Uniform Nomenclature in Scientific Work.*

R. T. COLBURN, *Chairman*, E. S. MORSE, A. B. PRESCOTT, R. S. WOODWARD, L. O. HOWARD.

12. *Committee on Extending the Influence of the Association into the Secondary Schools.*

E. S. MORSE, W. ORR, JR., T. C. CHAMBERLIN.

¹ All Committees are expected to present their reports to the COUNCIL not later than the third day of the meeting. Committees sending their reports to the Permanent Secretary one month before a meeting can have them printed for use at the meeting.

LOCAL COMMITTEES

FOR THE

BOSTON MEETING.

HONORARY PRESIDENT.

His Excellency ROGER WOLCOTT, Governor of the Commonwealth.

HONORARY VICE-PRESIDENTS.

- Dr. Charles Francis Adams, President of the Massachusetts Historical Society.
Mrs. Louis Agassiz, President of Radcliffe College.
Dr. E. Benjamin Andrews, President of Brown University.
Gen. Francis H. Appleton, President of the Massachusetts Horticultural Society.
Rev. Timothy Brosnahan, President of Boston College.
Dr. Elmer H. Capen, President of Tufts College.
Dr. Franklin Carter, President of Williams College.
Prof. James M. Crafts, President of the Massachusetts Institute of Technology.
Dr. Charles W. Eliot, President of Harvard University.
Mr. William Endicott, Jr., President of the Museum of Fine Arts.
Dr. Merrill E. Gates, President of Amherst College.
Prof. Wolcott Gibbs, President of the National Academy of Sciences; retiring President of the Association.
Prof. George L. Goodale, Director of the Harvard Botanic Gardens; ex-President of the Association.
Dr. Henry H. Goodell, President of the Massachusetts State Agricultural College.
Dr. G. Stanley Hall, President of Clark University.
Mrs. Julia J. Irvine, President of Wellesley College.
Rev. John F. Lehy, President of the College of the Holy Cross.
Mr. Augustus Lowell, Trustee of the Lowell Institute; Vice-President of the American Academy of Arts and Sciences.
Mrs. Elizabeth S. Mead, President of Mt. Holyoke College.
Dr. T. C. Mendenhall, President of the Worcester Polytechnic Institute; ex-President of the Association.
Dr. Charles S. Minot, President of the Boston Society of Natural History.
Prof. Edward S. Morse, Director of the Peabody Academy of Science; ex-President of the Association.
Prof. William H. Niles, President of the Appalachian Mountain Club.
Hon. Josiah Quincy, Mayor of Boston.
Hon. Robert S. Rantoul, President of the Essex Institute.
Prof. Charles S. Sargent, Director of the Arnold Arboretum.
Dr. Samuel H. Scudder, Local Secretary of the Boston meeting of the Association in 1880.
Dr. L. Clarke Seelye, President of Smith College.
Dr. Henry P. Walcott, Chairman of the State Board of Health of Massachusetts.
Dr. William F. Warren, President of Boston University.

HONORARY SECRETARIES.*

Dr. THOMAS DWIGHT. Prof. ALPHEUS HYATT. Prof. EDWARD C. PICKERING.

HONORARY TREASURER.

Col. HENRY L. HIGGINSON.

MEMBERS-AT-LARGE.

Dr. Samuel L. Abbot, Prof. C. Frank Allen, Rev. Charles G. Ames, Dr. Robert Amory, Prof. John H. Appleton, Gen. William A. Bancroft, Prof. Dana P. Bartlett, Prof. Carl Barus, Dr. Clarence J. Blake, Mr. William Bliss, Mr. George W. Blodgett, Mr. William Brewster, Dr. William S. Bryant, Prof. Hermon C. Bumpus, Prof. William E. Byerly, Dr. Arthur T. Cabot, Mr. J. Elliot Cabot, Mr. Samuel Cabot, Hon. Mellen Chamberlain, Dr. Seth C. Chandler, Mrs. Ednah D. Cheney, Mr. Charles F. Choate, Hon. William Claflin, Miss Cora H. Clarke, Prof. Judson B. Coit, Mrs. James M. Crafts, Hon. George G. Crocker, Prof. William O. Crosby, Dr. Charles B. Davenport, Prof. Davis E. Dewey, Mr. E. S. Dixwell, Prof. Amos E. Dolbear, Rev. E. Winchester Donald, Mr. J. Rayner Edmonds, Dr. Samuel Eliot, Dr. George J. Engelmann, Prof. William G. Farlow, Mrs. Charles E. Fay, Hon. Walbridge A. Field, Mrs. James T. Fields, Dr. John Fiske, Miss Alice C. Fletcher, Dr. Charles F. Folsom, Mr. John M. Forbes, Mr. John R. Freeman, Miss Ellen Frothingham, Mr. George A. Gardner, Mr. John L. Gardner, Prof. Augustus H. Gill, Mrs. George L. Goodale, Prof. Harry M. Goodwin, Rev. George A. Gordon, Dr. Samuel A. Green, Rev. Edward E. Hale, Prof. Asaph Hall, Prof. Edwin H. Hall, Mrs. G. W. Hammond, Prof. Henry W. Haynes, Mrs. Augustus Hemenway, Col. Thomas W. Higginson, Prof. Heinrich O. Hofman, Dr. Samuel A. Hopkins, Miss Cornelia Horsford, Miss Marian Hovey, Mr. Charles W. Hubbard, Mr. John E. Hudson, Prof. William E. Huntington, Mr. John G. Jack, Dr. B. Joy Jeffries, Mr. Samuel Johnson, Mr. Nathaniel T. Kidder, Prof. J. Sterling Kingsley, Prof. Leonard P. Kinnicutt, Mr. Amory A. Lawrence, Gen. Samuel C. Lawrence, Rt. Rev. William Lawrence, Mr. Solomon Lincoln, Mr. Arthur D. Little, Mrs. Henry Cabot Lodge, Gen. Charles G. Loring, Mr. A. Lawrence Lowell, Hon. Francis C. Lowell, Miss Ellen Mason, Miss Ida Mason, Mr. William Powell Mason, Mr. James Means, Prof. Allyn L. Merrill, Miss Susan Minns, Mrs. Charles S. Minot, Mr. Laurence Minot, Prof. Henry Mitchell, Dr. Samuel J. Mixter, Mr. John T. Morse, Jr., Prof. Arthur A. Noyes, Prof. Alpheus S. Packard, Mr. Henry Parkman, Prof. Benjamin O. Peirce, Prof. James Mills Peirce, Prof. William H. Pickering, Mr. Alexander S. Porter, Prof. William T. Porter, Hon. Frederick O. Prince, Prof. William L. Puffer, Dr. Charles P. Putnam, Dr. James J. Putnam, Dr. William L. Richardson, Mr. Edward Robinson, Mr. Thomas Roche, Mr. Waldo O. Ross, Mr. Barthold Schlesinger, Mr. Edwin P. Seaver, Dr. F. C. Shattuck, Mrs. Charles C. Smith, Prof. George F. Swain, Prof. Roland Thaxter, Mr. Nathaniel Thayer, Col. Henry A. Thomas, Mr. Charles Van Brunt, Miss Mary L. Ware, Dr. J. Collins Warren, Prof. Arthur G. Webster, Prof. Sarah F. Whiting, Mrs. Henry Whitman, Mrs. Henry M. Whitney, Prof. Mary A. Willcox, Dr. Francis H. Williams, Mrs. Francis H. Williams, Rt. Rev. J. J. Williams, Prof. S. Homer Woodbridge, Dr. Morrill Wyman.

COMMITTEE ON FINANCE.

Chairman, The Honorary Treasurer, Col. HENRY L. HIGGINSON.

Secretary, Col. EDWARD B. ROBINS.

Mr. Edwin H. Abbot, Mr. Edward Atkinson, Mr. Thomas P. Beal, Mr. Charles P. Bowditch, Mr. Lamont G. Burnham, Mr. Samuel Carr, Mr. B. P. Cheney, Mr. Alexander Cochrane, Mr. T. Jefferson Coolidge, Jr., Mr. Allen Curtis, Mr. Louis Curtis, Mr.

* All correspondence should be addressed to the Local Secretary, Prof. H. W. TYLER, Massachusetts Institute of Technology, Boston.

Eben S. Draper, Mr. William Endicott, Jr., Mr. Arthur F. Estabrook, Mr. George F. Fabyan, Mr. Charles Fairchild, Mr. Augustus Flagg, Mr. Rufus A. Flanders, Mr. J. Malcolm Forbes, Mr. George P. Gardner, Mr. William A. Gaston, Mr. Francis L. Higginson, Mr. Edward W. Hooper, Mr. F. W. Hunnewell, Mr. Charles C. Jackson, Mr. D. Webster King, Col. Thomas L. Livermore, Mr. Arthur T. Lyman, Mr. William Minot, Mr. E. Rollins Morse, Gen. F. A. Osborn, Gen. Charles J. Paine, Mr. F. H. Peabody, Col. Albert A. Pope, Mr. Spencer W. Richardson, Gen. Alfred P. Rockwell, Hon. Stephen Salisbury, Gen. Thomas Sherwin, Mr. A. Shuman, Mr. George S. Silsbee, Mr. James P. Stearns, Mr. Howard Stockton, Mr. Moorfield Storey, Mr. A. J. Tower, Mr. Frank G. Webster, Gen. Stephen M. Weld, Mr. Samuel Wells, Mr. Henry M. Whitney, Mr. George Wigglesworth, Mr. Moses Williams, Mr. Robert Winsor.

RECEPTION COMMITTEE.

Chairman: DR. J. R. CHADWICK.

Secretary: DR. JOHN HOMANS, 2D.

Mr. Outram Bangs, Dr. William S. Bigelow, Mrs. Frank Bolles, Mr. Eliot C. Clarke, Mr. E. H. Clement, Hon. T. Jefferson Coolidge, Dr. W. T. Councilman, Miss Florence Cushing, Mrs. Charles W. Eliot, Dr. Harold C. Ernst, Mr. Desmond Fitz Gerald, Mrs. George L. Goodale, Miss Alice Bache Gould, Mrs. Asa Gray, Mr. John C. Gray, Prof. Susan M. Hallowell, Mr. Augustus Hemenway, Mrs. Henry L. Higginson, Mr. John H. Holmes, Miss Agnes Irwin, Mr. Eben D. Jordan, Mrs. Mary M. Kehew, Dr. George G. Kennedy, Mrs. Charles G. Loring, Miss Katherine P. Loring, Mrs. A. Lawrence Lowell, Mrs. Francis C. Lowell, Mr. Percival Lowell, Prof. Arthur Michael, Mrs. Alice Freeman Palmer, Mrs. John C. Phillips, Mrs. Edward C. Pickering, Mr. Herbert Putnam, Mrs. Robert H. Richards, Mrs. William Barton Rogers, Mr. John C. Ropes, Mrs. A. Lawrence Rotch, Prof. John D. Runkle, Mrs. Charles S. Sargent, Mrs. Barthold Schlesinger, Mr. J. Montgomery Sears, Mrs. Nathaniel S. Shaler, Mr. Quincy A. Shaw, Mrs. Quincy A. Shaw, Hon. Charles F. Sprague, Gen. Charles H. Taylor, Prof. Elihu Thomson, Mrs. David P. Todd, Mrs. John Trowbridge, Mr. Lucius Tuttle, Mrs. Francis A. Walker, Mrs. Charles E. Ware, Mrs. S. D. Warren, Dr. Charles G. Weld, Dr. James H. Wright.

COMMITTEE ON ROOMS FOR MEETINGS.

Chairman: PROF. CHARLES R. CROSS.

Secretary: MR. CHARLES L. NORTON.

Prof. George H. Barton, Prof. Harry E. Clifford, Mr. Samuel Henshaw, Prof. Eleazer B. Homer, Prof. Gaetano Lanza, Prof. Frank A. Laws, Prof. Cecil H. Peabody, Prof. Robert H. Richards, Prof. Henry P. Talbot, Dr. William F. Whitney.

COMMITTEE ON INVITATIONS TO FOREIGN GUESTS.

Chairman: DR. HENRY P. BOWDITCH.

Secretary: MR. A. LAWRENCE ROTCH.

Mr. Edward Atkinson, President James M. Crafts, Prof. George L. Goodale, Mr. Samuel Henshaw, Mr. E. D. Leavitt, Mr. Augustus Lowell, Hon. George H. Lyman, Prof. Charles Sedgwick Minot, Prof. Edward S. Morse, Prof. Edward C. Pickering, Prof. William Z. Ripley, Prof. Nathaniel S. Shaler, Dr. Theobald Smith, Prof. William E. Story, Prof. John Trowbridge, Prof. William Watson.

COMMITTEE ON EXCURSIONS.

Chairman: GEN. FRANCIS H. APPLETON.*Secretary:* MR. JOHN WOODBURY.

Mr. E. Pierson Beebe, Prof. Alfred E. Burton, Mr. Philip A. Chase, Prof. William M. Davis, Mr. W. B. de Las Casas, Mr. Woodward Emery, Prof. Charles E. Fay, Mr. Parker B. Field, Mr. J. D. W. French, Dr. Edward G. Gardiner, Mr. Henry W. Lamb, Mr. Rosewell B. Lawrence, Mr. Theophilus Parsons, Mr. Harvey N. Shepard, Mr. Charles E. Stratton, Mr. C. J. H. Woodbury, Mr. J. B. Woodworth.

CAMBRIDGE COMMITTEE.

Chairman: PRESIDENT CHARLES W. ELIOT.*Secretary:* MR. BYRON S. HURLBURT.

Prof. Comfort A. Adams, Mr. Walter S. Burke, Dr. Walter Faxon, Prof. George L. Goodale, Prof. Ira N. Hollis, Mr. William C. Lane, Prof. David G. Lyon, Prof. Charles H. Moore, Prof. Hugo Münsterberg, Prof. Edward C. Pickering, Prof. Frederic W. Putnam, Prof. Theodore W. Richards, Dr. Benjamin L. Robinson, Dr. Dudley A. Sargent, Prof. Nathaniel S. Shaler, Prof. Jeremiah Smith, Prof. John Trowbridge, Prof. H. Langford Warren, Prof. John E. Wolff.

SALEM COMMITTEE.

Chairman: HON. ROBERT S. RANTOUL.*Secretary:* MR. HENRY M. BATCHELDER.

Gen. Francis H. Appleton, Mr. Clifford Brigham, Mr. Thomas Carroll, Mr. William O. Chapman, Mr. William R. Colby, Mr. Francis Cox, Col. J. Frank Dalton, Mr. Edwin O. Foster, Mr. Augustus A. Galloupe, Col. Henry A. Hale, Mr. George M. Harris, Mr. Gardner M. Jones, Mr. David M. Little, Mr. J. T. Mahoney, Mr. Richard C. Manning, Prof. Edward S. Morse, Mr. Winfield S. Nevins, Mr. George L. Peabody, Mr. Henry W. Peabody, Mr. S. Endicott Peabody, Rev. Alfred P. Putnam, Mr. John Robinson, Mr. Matthew Robson, Mr. Willis H. Ropes, Mr. Patrick F. Tierney, Mr. Joseph H. Towne, Mr. Walter H. Trumbull, Mr. Ross Turner, Hon. David P. Waters, Capt. George M. Whipple.

EXECUTIVE COMMITTEE.

Chairman: PROF. WILLIAM T. SEDGWICK.*Secretary:* PROF. H. W. TYLER.

Gen. Francis H. Appleton, Mr. Francis Blake, Dr. Henry P. Bowditch, Dr. James R. Chadwick, Prof. Charles R. Cross, Dr. Thomas Dwight, President Charles W. Eliot, Prof. Charles E. Fay, Dr. Charles Harrington, Mr. Francis R. Hart, Mr. Samuel Henshaw, Col. Henry L. Higginson, Prof. Alpheus Hyatt, Dr. Charles Sedgwick Minot, Mr. James P. Munroe, Mrs. John C. Phillips, Prof. Edward C. Pickering, Hon. Josiah Quincy, Hon. Robert S. Rantoul, Mr. John Ritchie, Jr., Col. Edward B. Robins, Mrs. William Barton Rogers, Mr. A. Lawrence Rotch, Mrs. Roger Wolcott.

LOCAL SECRETARY.

PROF. H. W. TYLER, Massachusetts Institute of Technology, Boston.

MEETINGS AND OFFICERS OF THE ASSOCIATION OF AMERICAN GEOLOGISTS AND NATURALISTS.

MEETING.	DATE.	PLACE.	CHAIRMAN.	SECRETARY.	ASSIST' SEC'Y.	TREASURER.
1st	April 2, 1840,	Philadelphia,	Edward Hitchcock,*	L. C. Beck,*	{ B. Silliman, jr.,* { C. B. Trego,* { J. D. Whitney,* { M. B. Williams,*	John Locke.* Douglas Houghton.* Douglas Houghton.* E. C. Herrick.* B. Silliman, jr.*
2d	April 5, 1841,	Philadelphia,	Benjamin Silliman,*	L. C. Beck,*		
3d	April 25, 1842,	Boston,	S. G. Morton,*	C. T. Jackson,*		
4th	April 26, 1843,	Albany,	Henry D. Rogers,*	B. Silliman, jr.,*		
5th	May 8, 1844,	Washington,	John Locke,*	{ B. Silliman, jr.,* { O. P. Hubbard,*		
6th	April 30, 1845,	New Haven,	Wm. B. Rogers,*	{ B. Silliman, jr.,* { J. Lawrence Smith,*		
7th	Sept. 2, 1846,	New York,	C. T. Jackson,*	B. Silliman, jr.,*		
8th	Sept. 20, 1847,	Boston,	Wm. B. Rogers,†*	Jeffries Wyman,*		

* Deceased.

† Professor ROGERS, as chairman of this last meeting, called the first meeting of the new Association to order and presided until it was fully organized by the adoption of a constitution. As he was thus the first presiding officer of the new Association, it was directed at the Hartford meeting that his name be placed at the head of the Past Presidents of the American Association for the Advancement of Science.

MEETINGS.	PLACE.	DATE.	MEMBERS IN ATTEND- ANCE.	NUMBER OF MEMBERS.
1.	Philadelphia	Sept. 20, 1848	?	461
2.	Cambridge	Aug. 14, 1849	?	540
3.	Charleston	Mar. 12, 1850	?	622
4.	New Haven	Aug. 19, 1850	?	704
5.	Cincinnati	May 5, 1851	87	800
6.	Albany	Aug. 19, 1851	194	769
7.	Cleveland	July 28, 1853	?	940
8.	Washington	April 26, 1854	168	1004
9.	Providence	Aug. 15, 1855	166	605
10.	2nd Albany	Aug. 20, 1855	381	722
11.	Montreal	Aug. 12, 1857	351	946
12.	Baltimore	April 28, 1858	190	962
13.	Springfield	Aug. 3, 1859	190	862
14.	Newport	Aug. 1, 1860	135	644
15.	Buffalo	Aug. 15, 1866	79	687
16.	Burlington	Aug. 21, 1867	73	415
17.	Chicago	Aug. 5, 1868	259	686
18.	Salem	Aug. 18, 1869	244	511
19.	Troy	Aug. 17, 1870	188	536
20.	Indianapolis	Aug. 16, 1871	196	668
21.	Dubuque	Aug. 15, 1872	164	610
22.	Portland	Aug. 20, 1873	195	670
23.	Hartford	Aug. 12, 1874	224	722
24.	Detroit	Aug. 11, 1875	165	807
25.	2nd Buffalo	Aug. 23, 1876	215	867
26.	Nashville	Aug. 29, 1877	173	953
27.	St. Louis	Aug. 21, 1878	134	962
28.	Saratoga	Aug. 27, 1879	256	1030
29.	Boston	Aug. 25, 1880	997	1555
30.	2nd Cincinnati	Aug. 17, 1881	500	1699
31.	2nd Montreal	Aug. 23, 1882	937	1922
32.	Minneapolis	Aug. 15, 1883	328	2033
33.	2nd Philadelphia	Sept. 3, 1884	1261*	1981
34.	Ann Arbor	Aug. 26, 1885	364	1956
35.	3d Buffalo	Aug. 18, 1886	445	1886
36.	New York	Aug. 10, 1887	729	1956
37.	2nd Cleveland	Aug. 14, 1888	342	1964
38.	Toronto	Aug. 26, 1889	424	1952
39.	2d Indianapolis	Aug. 19, 1890	364	1944
40.	2d Washington	Aug. 19, 1891	653†	2054
41.	Rochester	Aug. 17, 1892	456	2037
42.	Madison	Aug. 17, 1893	290	1939
43.	Brooklyn	Aug. 15, 1894	488	1802
44.	2d Springfield	Aug. 28, 1895	368	1913
45.	4th Buffalo	Aug. 24, 1896	333	1890
46.	2d Detroit	Aug. 9, 1897	283‡	1782
47.	2d Boston	Aug. 22, 1898	—	—

* Including 303 members of the British Association and 9 other foreign guests.

† Including 24 Foreign Honorary members for the meeting.

‡ Including 15 Foreign Honorary members and associates for the meeting.

OFFICERS OF THE MEETINGS OF THE ASSOCIATION.

[The number before the name is that of the meeting; the year of the meeting follows the name; the asterisk after a name indicates that the member is deceased.]

PRESIDENTS.

- | | |
|------------------------------------|----------------------------------|
| 1. { Wm. B. ROGERS,* 1848. | 26. SIMON NEWCOMB, 1877. |
| { W. C. REDFIELD,* 1848. | 27. O. C. MARSH, 1878. |
| 2. JOSEPH HENRY,* 1849. | 28. G. F. BARKER, 1879. |
| 3, 4, 5. A. D. BACHE,* March meet- | 29. LEWIS H. MORGAN,* 1880. |
| ing, 1850, in absence of Jo- | 30. G. J. BRUSH, 1881. |
| SEPH HENRY.* August meet- | 31. J. W. DAWSON, 1882. |
| ing, 1850. May meeting, 1851. | 32. C. A. YOUNG, 1883. |
| 6. LOUIS AGASSIZ,* August meet- | 33. J. P. LESLEY, 1884. |
| ing, 1851. | 34. H. A. NEWTON,* 1885. |
| (No meeting in 1852). | 35. EDWARD S. MORSE, 1886. |
| 7. BENJAMIN PIERCE,* 1853. | 36. S. P. LANGLEY, 1887. |
| 8. JAMES D. DANA,* 1854. | 37. J. W. POWELL, 1888. |
| 9. JOHN TORREY,* 1855. | 38. T. C. MENDENHALL, 1889. |
| 10. JAMES HALL,* 1856. | 39. G. LINCOLN GOODALE, 1890. |
| 11, 12. ALEXIS CASWELL,* 1857, in | 40. ALBERT B. PRESCOTT, 1891. |
| place of J. W. BAILEY,* de- | 41. JOSEPH LECONTE, 1892. |
| ceased. 1858, in absence of | 42. WILLIAM HARKNESS, 1893. |
| JEFFRIES WYMAN.* | 43. DANIEL G. BRINTON, 1894. |
| 13. STEPHEN ALEXANDER,* 1859. | 44. E. W. MORLEY, 1895. |
| 14. ISAAC LEA,* 1860. | { EDWARD D. COPE,* 1896. |
| (No meetings for 1861-65). | 45. { THEODORE GILL, as senior |
| 15. F. A. P. BARNARD,* 1866. | vice president acted after |
| 16. J. S. NEWBERRY,* 1867. | the death of Prof. COPE. |
| 17. B. A. GOULD,* 1868. | 46. WOLCOTT GIBBS, 1897, absent. |
| 18. J. W. FOSTER,* 1869. | W J MCGEE, Acting President. |
| 19. T. STERRY HUNT,* 1870, in the | 47. F. W. PUTNAM, 1898. |
| absence of Wm. CHAUVENET.* | |
| 20. ASA GRAY,* 1871. | |
| 21. J. LAWRENCE SMITH,* 1872. | |
| 22. JOSEPH LOVERING,* 1873. | |
| 23. J. L. LECONTE,* 1874. | |
| 24. J. E. HILGARD,* 1875. | |
| 25. WILLIAM B. ROGERS,* 1876. | |

VICE PRESIDENTS.

There were no Vice Presidents until the 11th meeting when there was a single Vice President for each meeting. At the 24th meeting the Association met in Sections A and B, each presided over by a Vice President. At the 31st meeting nine sections were organized, each with a Vice President as its presiding officer. In 1886, Section G (Microscopy) was given up. In 1892, Section F was divided into F, Zoology; G, Botany.

1857-1874.

- | | |
|---|--|
| 11. ALEXIS CASWELL,* 1857, acted as President. | 17. CHARLES WHITTLESEY,* 1868. |
| 12. JOHN E. HOLBROOK,* 1858, not present. | 18. OGDEN N. ROOD, 1869. |
| 13. EDWARD HITCHCOCK,* 1859. | 19. T. STERRY HUNT,* 1870, acted as President. |
| 14. B. A. GOULD,* 1860. | 20. G. F. BARKER, 1871. |
| 15. A. A. GOULD,* 1866, in absence of R. W. GIBBES. | 21. ALEXANDER WINCHELL,* 1872. |
| 16. WOLCOTT GIBBS, 1867. | 22. A. H. WORTHEN,* 1873, not present. |
| | 23. C. S. LYMAN,* 1874. |

1875-1881.

Section A.—Mathematics, Physics and Chemistry.

24. H. A. NEWTON,* 1875.
25. C. A. YOUNG, 1876.
26. R. H. THURSTON, 1877, in the absence of E. C. PICKERING.
27. R. H. THURSTON, 1878.
28. S. P. LANGLEY, 1879.
29. ASAPH HALL, 1880.
30. WILLIAM HARKNESS, 1881, in the absence of A. M. MAYER.*

Section B.—Natural History.

24. J. W. DAWSON, 1875.
25. EDWARD S. MORSE, 1876.
26. O. C. MARSH, 1877.
27. AUG. R. GROTE, 1878.
28. J. W. POWELL, 1879.
29. ALEXANDER AGASSIZ, 1880.
30. EDWARD T. COX, 1881, in the absence of GEORGE ENGELMANN.*

CHAIRMEN OF SUBSECTIONS, 1875-1881.

Subsection of Chemistry.

24. S. W. JOHNSON, 1875.
25. G. F. BARKER, 1876.
26. N. T. LUPTON,* 1877.
27. F. W. CLARKE, 1878.
28. F. W. CLARKE, 1879, in the absence of IRA REMSEN.
29. J. M. ORDWAY, 1880.
30. G. C. CALDWELL, 1881, in the absence of W. R. NICHOLS.*

Subsection of Microscopy.

25. R. H. WARD, 1876.
26. R. H. WARD, 1877.
27. R. H. WARD, 1878, in the absence of G. S. BLACKIE.*

28. E. W. MORLEY, 1879.
29. S. A. LATTIMORE, 1880.
30. A. B. HERVEY, 1881.

Subsection of Anthropology.

24. LEWIS H. MORGAN,* 1875.
25. LEWIS H. MORGAN,* 1876.
26. DANIEL WILSON,* 1877, not present.
27. United with Section B.
28. DANIEL WILSON,* 1879.
29. J. W. POWELL, 1880.
30. GARRICK MALLERTY,* 1881.

Subsection of Entomology.

30. J. G. MORRIS,* 1881.

VICE PRESIDENTS OF SECTIONS, 1882-

*Section A.—Mathematics and
Astronomy.*

31. W. A. ROGERS,* 1882, in the absence of WM. HARKNESS.
32. W. A. ROGERS, 1883.
33. H. T. EDDY, 1884.
34. WM. HARKNESS, 1885, in the absence of J. M. VAN VLECK.
35. J. W. GIBBS, 1886.
36. J. R. EASTMAN, 1887, in place of W. FERREL.* resigned.
37. ORMOND STONE, 1888.
38. R. S. WOODWARD, 1889.
39. S. C. CHANDLER, 1890.
40. E. W. HYDE, 1891.
41. J. R. EASTMAN, 1892.
42. C. L. DOOLITTLE, 1893.
43. { G. C. COMSTOCK, 1894.
EDGAR FRISBY, 1894.
44. EDGAR FRISBY, 1895, in place of E. H. HOLDEN, resigned.
45. ALEX. MACFARLANE, 1896 in place of WM. E. STORY, resigned.
46. W. W. BEMAN, 1897.
47. E. E. BARNARD, 1898.

Section B.—Physics.

31. T. C. MENDENHALL, 1882.
32. H. A. ROWLAND, 1883.
33. J. TROWBRIDGE, 1884.
34. S. P. LANGLEY, 1885, in place of C. F. BRACKETT, resigned.
35. C. F. BRACKETT, 1886.
36. W. A. ANTHONY, 1887.
37. A. A. MICHELSON, 1888.
38. H. S. CARHART, 1889.
39. CLEVELAND ABBE, 1890.
40. F. E. NIPHER, 1891.
41. B. F. THOMAS, 1892.
42. E. L. NICHOLS, 1893.
43. WM. A. ROGERS, 1894.
44. W. LeCONTE STEVENS, 1895.
45. CARL LEO MEES, 1896.
46. CARL BARUS, 1897.
47. F. P. WHITMAN, 1898.

Section C.—Chemistry.

31. H. C. BOLTON, 1882.
32. E. W. MORLEY, 1883.
33. J. W. LANGLEY, 1884.
34. N. T. LUPTON,* 1885, in absence of W. R. NICHOLS.*
35. H. W. WILEY, 1886.
36. A. B. PRESCOTT, 1887.
37. C. E. MUNROE, 1888.
38. W. L. DUDLEY, 1889.
39. R. B. WARDER, 1890.
40. R. C. KEDZIE, 1891.
41. ALFRED SPRINGER, 1892.
42. EDWARD HART, 1893.
43. T. H. NORTON, 1894.
44. WM. McMURTRIE, 1895.
45. W. A. NOYES, 1896.
46. W. P. MASON, 1897.
47. EDGAR F. SMITH, 1898.

*Section D.—Mechanical Science
and Engineering.*

31. W. P. TROWBRIDGE,* 1882.
32. DE VOLSON WOOD, 1883, absent, but place was not filled.
33. R. H. THURSTON, 1884.
34. J. BURKITT WEBB, 1885.
35. O. CHANUTE, 1886.
36. E. B. COXE, 1887.
37. C. J. H. WOODBURY, 1888.
38. JAMES E. DENTON, 1889.
39. JAMES E. DENTON, 1890, in place of A. BEARDSLEY, absent.
40. THOMAS GRAY, 1891.
41. J. B. JOHNSON, 1892.
42. S. W. ROBINSON, 1893.
43. MANSFIELD MERRIMAN, 1894.
44. WILLIAM KENT, 1895.
45. FRANK O. MARVIN, 1896.
46. JOHN GALBRAITH, 1897.
47. M. E. COOLEY, 1898.

VICE PRESIDENTS OF SECTIONS, CONTINUED.

Section E.—Geology and Geography.

31. E. T. COX, 1882.
32. C. H. HITCHCOCK, 1883.
33. N. H. WINCHELL, 1884.
34. EDWARD ORTON, 1885.
35. T. C. CHAMBERLIN, 1886.
36. G. K. GILBERT, 1887.
37. GEORGE H. COOK,* 1888.
38. CHARLES A. WHITE, 1889.
39. JOHN C. BRANNER, 1890.
40. J. J. STEVENSON, 1891.
41. H. S. WILLIAMS, 1892.
42. CHARLES D. WALCOTT, 1893.
43. SAMUEL CALVIN, 1894.
44. JED. HOCHKISS, 1895.
45. B. K. EMERSON, 1896.
46. { I. C. WHITE, 1897.
E. W. CLAYPOLE, 1897.
47. H. L. FAIRCHILD, 1898.

Section F.—Biology, 1882-92.

31. W. H. DALL, 1882.
32. W. J. BEAL, 1883.
33. E. D. COPE,* 1884.
34. T. J. BURRILL, 1885, in the absence of B. G. WILDER.
35. H. P. BOWDITCH, 1886.
36. W. G. FARLOW, 1887.
37. C. V. RILEY,* 1888.
38. GEORGE L. GOODALE, 1889.
39. C. S. MINOT, 1890.
40. J. M. COULTER, 1891.
41. S. H. GAGE, 1892.

Section F.—Zoölogy.

42. HENRY F. OSBORN, 1893.
43. J. A. LINTNER, 1894, in place of S. H. SCUDDER, resigned.
44. L. O. HOWARD, 1895, in place of D. S. JORDAN, resigned.
45. THEO. GILL, 1896.
46. L. O. HOWARD, 1897, in place of G. BROWN GOODE,* deceased.
47. A. S. PACKARD, 1898.

Section G.—Microscopy, 1882-85.

31. A. H. TUTTLE, 1882.
32. J. D. COX, 1883.
33. T. G. WORMLEY, 1884.
34. S. H. GAGE, 1885.
(Section united with F in 1886.)

Section G.—Botany.

42. CHARLES E. BESSEY, 1893.
43. { L. M. UNDERWOOD, 1894.
C. E. BESSEY, 1894.
44. J. C. ARTHUR, 1895.
45. N. L. BRITTON, 1896.
46. G. F. ATKINSON, 1897.
47. W. G. FARLOW, 1898.

Section H.—Anthropology.

31. ALEXANDER WINCHELL,* 1882.
32. OTIS T. MASON, 1883.
33. EDWARD S. MORSE, 1884.
34. J. OWEN DORSEY,* 1885, in absence of W. H. DALL.
35. HORATIO HALE,* 1886.
36. D. G. BRINTON, 1887.
37. CHARLES C. ABBOTT, 1888.
38. GARRICK MALLERY,* 1889.
39. FRANK BAKER, 1890.
40. JOSEPH JASTROW, 1891.
41. W. H. HOLMES, 1892.
42. J. OWEN DORSEY,* 1893.
43. FRANZ BOAS, 1894.
44. F. H. CUSHING, 1895.
45. ALICE C. FLETCHER, 1896.
46. W J MCGEE, 1897.
47. J. MCK. CATTELL, 1898.

Section I.—Social and Economic Science.

31. E. B. ELLIOTT,* 1882.
32. FRANKLIN B. HOUGH,* 1883.
33. JOHN EATON,* 1884.
34. EDWARD ATKINSON, 1885.
35. JOSEPH CUMMINGS,* 1886.
36. H. E. ALVORD, 1887.
37. CHARLES W. SMILEY, 1888.
38. CHARLES S. HILL, 1889.
39. J. RICHARDS DODGE, 1890.
40. EDMUND J. JAMES, 1891.
41. L. F. WARD, 1892, in place of S. D. HORTON,* resigned.
42. WILLIAM H. BREWER, 1893.
43. HENRY FARQUHAR, 1894.
44. B. E. FERNOW, 1895.
45. W. L. LAZENBY, 1896.
46. R. T. COLBURN, 1897.
47. ARCHIBALD BLUE, 1898.

SECRETARIES.

General Secretaries, 1848-

1. WALTER R. JOHNSON,* 1848.
2. E. N. HORSFORD,* 1849, in absence of JEFFRIES WYMAN.*
3. L. R. GIBBS, 1850, in absence of E. C. HERRICK.*
4. E. C. HERRICK,* 1850.
5. WILLIAM B. ROGERS,* 1851, in absence of E. C. HERRICK.*
6. WILLIAM B. ROGERS,* 1851.
7. S. ST. JOHN,* 1853, in absence of J. D. DANA.*
8. J. LAWRENCE SMITH,* 1854.
9. WOLCOTT GIBBS, 1855.
10. B. A. GOULD,* 1856.
11. JOHN LECONTE,* 1857.
12. W. M. GILLESPIE,* 1858, in absence of WM. CHAUVENET.*
13. WILLIAM CHAUVENET,* 1859.
14. JOSEPH LECONTE, 1860.
15. ELIAS LOOMIS,* 1866, in the absence of W. P. TROWBRIDGE*
16. C. S. LYMAN,* 1867.
17. SIMON NEWCOMB, 1868, in absence of A. P. ROCKWELL.
18. O. C. MARSH, 1869.
19. F. W. PUTNAM, 1870, in absence of C. F. HARTT *
20. F. W. PUTNAM, 1871.
21. EDWARD S. MORSE, 1872.
22. C. A. WHITE, 1873.
23. A. C. HAMLIN, 1874.
24. S. H. SCUDDER, 1875.
25. T. C. MENDENHALL, 1876.
26. AUG. R. GROTE, 1877.
27. H. C. BOLTON, 1878.
28. H. C. BOLTON, 1879, in the absence of GEORGE LITTLE.
29. J. K. REES, 1880.
30. C. V. RILEY,* 1881.
31. WILLIAM SAUNDERS, 1882.
32. J. R. EASTMAN, 1883.
33. ALFRED SPRINGER, 1884.
34. C. S. MINOT, 1885.
35. S. G. WILLIAMS, 1886.
36. WILLIAM H. PETTEE, 1887.

37. JULIUS POHLMAN, 1888.
38. C. LEO MEES, 1889.
39. H. C. BOLTON, 1890.
40. H. W. WILEY, 1891.
41. A. W. BUTLER, 1892.
42. T. H. NORTON, 1893.
43. H. L. FAIRCHILD, 1894.
44. JAS. LEWIS HOWE, 1895.
45. CHARLES R. BARNES, 1896.
46. ASAPH HALL, JR., 1897.
47. J. MCMAHON, 1898, in place of D. S. KELLICOTT,* deceased.

Permanent Secretaries, 1851-

- 5-7. SPENCER F. BAIRD,* 1851-4.
- 8-17. JOSEPH LOVERING,* 1854-68.
18. F. W. PUTNAM, 1869, in the absence of J. LOVERING.*
- 19-21. JOSEPH LOVERING,* 1870-73.
- 22-46. F. W. PUTNAM, 1873-98.
- 47-48. L. O. HOWARD, 1898-99.

*Assistant General Secretaries,
1882-1887.*

31. J. R. EASTMAN, 1882.
32. ALFRED SPRINGER, 1883.
33. C. S. MINOT, 1884, in absence of E. S. HOLDEN.
34. S. G. WILLIAMS, 1885, in the absence of C. C. ABBOTT.
35. W. H. PETTEE, 1886.
36. J. C. ARTHUR, 1887.

Secretaries of the Council, 1888-

37. C. LEO MEES, 1888.
38. H. C. BOLTON, 1889.
39. H. W. WILEY, 1890.
40. A. W. BUTLER, 1891.
41. T. H. NORTON, 1892.
42. H. LEROY FAIRCHILD, 1893.
43. JAS. LEWIS HOWE, 1894.
44. CHARLES R. BARNES, 1895.
45. ASAPH HALL, JR., 1896.
46. D. S. KELLICOTT,* 1897.
47. FREDERICK BEDELL, 1898.

Secretaries of Section A.—Mathematics, Physics and Chemistry, 1875–81.

24. { S. P. LANGLEY, 1875.
T. C. MENDENHALL, 1875.
25. A. W. WRIGHT, 1876.
26. H. C. BOLTON, 1877.
27. F. E. NIPHER, 1878.
28. J. K. REES, 1879.
29. H. B. MASON, 1880.
30. E. T. TAPPAN, 1881, in the absence of JOHN TROWBRIDGE.

Secretaries of Section B.—Natural History, 1875–81.

24. EDWARD S. MORSE, 1875.
25. ALBERT H. TUTTLE, 1876.
26. WILLIAM H. DALL, 1877.
27. GEORGE LITTLE, 1878.
28. WILLIAM H. DALL, 1879, in the absence of A. C. WETHERBY.
29. CHARLES V. RILEY,* 1880.
30. WILLIAM SAUNDERS, 1881.

SECRETARIES OF SUBSECTIONS, 1875–81.

Subsection of Chemistry.

24. F. W. CLARKE, 1875.
25. H. C. BOLTON, 1876.
26. P. SCHWEITZER, 1877.
27. A. P. S. STUART, 1878.
28. W. R. NICHOLS,* 1879.
29. C. E. MUNROE, 1880.
30. ALFRED SPRINGER, 1881, in the absence of R. B. WARDER.

Subsection of Entomology.

30. B. P. MANN, 1881.

Subsection of Anthropology.

24. F. W. PUTNAM, 1875.
25. OTIS T. MASON, 1876.
- 26, 27. United with Section B.
- 28, 29, 30. J. G. HENDERSON, 1879–81.

Subsection of Microscopy.

25. E. W. MORLEY, 1876.
26. T. O. SOMMERS, JR., 1877.
27. G. J. ENGELMANN, 1878.
- 28, 29. A. B. HERVEY, 1879–1880.
30. W. H. SEAMAN, 1881, in the absence of S. P. SHARPLES.

SECRETARIES OF THE SECTIONS, 1882–

Section A.—Mathematics and Astronomy.

31. H. T. EDDY, 1882.
32. G. W. HOUGH, 1883, in the absence of W. W. JOHNSON.
33. G. W. HOUGH, 1884.
34. E. W. HYDE, 1885.
35. S. C. CHANDLER, 1886.
36. H. M. PAUL, 1887.
37. C. C. DOOLITTLE, 1888.
38. G. C. COMSTOCK, 1889.
39. W. W. BEMAN, 1890.
40. F. H. BIGELOW, 1891.
41. WINSLOW UPTON, 1892.
42. C. A. WALDO, 1893, in the absence of A. W. PHILLIPS.
43. J. C. KERSHNER, 1894, in place of W. W. BEMAN, resigned.
44. ASAPH HALL, JR., 1895, in place of E. H. MOORE, resigned.
45. EDWIN B. FROST, 1896.
46. JAMES McMAHON, 1897.
47. ———— 1898, in place of ALEXANDER ZIWET, resigned.

Section B.—Physics.

31. C. S. HASTINGS, 1882.
32. F. E. NIPHER, 1883, in the absence of C. K. WEAD.
33. N. D. C. HODGES, 1884.
34. B. F. THOMAS, 1885, in place of A. A. MICHELSON, resigned.
35. H. S. CARHART, 1886.
36. C. LEO MEES, 1887.
37. ALEX. MACFARLANE, 1888.
38. E. L. NICHOLS, 1889.
39. E. M. AVERY, 1890.
40. ALEX. MACFARLANE, 1891.
41. BROWN AYRES, 1892.
42. W. LECONTE STEVENS, 1893.
43. B. W. SNOW, 1894.
44. E. MERRITT, 1895.
45. FRANK P. WHITMAN, 1896.
46. FREDERICK BEDELL, 1897.
47. ————, 1898, in place of E. B. ROSA, resigned.

SECRETARIES OF THE SECTIONS, CONTINUED.

Section C.—Chemistry.

31. ALFRED SPRINGER, 1882.
32. { J. W. LANGLEY, 1883.
W. MCMURTRIE, 1883.
33. H. CARMICHAEL, 1884, in the absence of R. B. WARDER.
34. F. P. DUNNINGTON, 1885.
35. W. MCMURTRIE, 1886.
36. C. S. MABERY, 1887.
37. W. L. DUDLEY, 1888.
38. EDWARD HART, 1889.
39. W. A. NOYES, 1890.
40. T. H. NORTON, 1891.
41. JAS. LEWIS HOWE, 1892.
42. H. N. STOKES, 1893, in the absence of J. U. NEF.
43. MORRIS LOEB, 1894, in place of S. M. BABCOCK, resigned.
44. { W. P. MASON, 1895.
W. O. ATWATER, 1895.
45. FRANK P. VENABLE, 1896.
46. P. C. FREER, 1897.
47. C. BASKERVILLE, 1898.

Section D.—Mechanical Science and Engineering.

31. J. BURKITT WEBB, 1882, in the absence of C. R. DUDLEY.
32. J. BURKITT WEBB, 1883, *pro tempore*.
33. J. BURKITT WEBB, 1884.
34. C. J. H. WOODBURY, 1885.
35. WILLIAM KENT, 1886.
36. G. M. BOND, 1887.
37. ARTHUR BEARDSLEY, 1888.
38. W. B. WARNER, 1889.
39. THOMAS GRAY, 1890.
40. WILLIAM KENT, 1891.
41. O. H. LANDRETH, 1892.
42. D. S. JACOBUS, 1893.
43. JOHN H. KINEALY, 1894.
44. H. S. JACOBY, 1895.
45. JOHN GALBRAITH, 1896.
46. JOHN J. FLATHER, 1897.
47. W. S. ALDRICH, 1898.

Section E.—Geology and Geography.

31. H. S. WILLIAMS, 1882, in the absence of C. E. DUTTON.
32. A. A. JULIEN, 1883.
33. E. A. SMITH, 1884.
34. G. K. GILBERT, 1885, in the absence of H. C. LEWIS.*
35. E. W. CLAYPOLE, 1886.
36. W. M. DAVIS, 1887, in the absence of T. B. COMSTOCK.
37. JOHN C. BRANNER, 1888.
38. JOHN C. BRANNER, 1889.
39. SAMUEL CALVIN, 1890.
40. W J MCGEE, 1891.
41. R. D. SALISBURY, 1892.
42. W. H. HOBBS, 1893, in place of R. T. HILL, resigned.
43. JED. HOTCHKISS, 1894, in place of W. M. DAVIS, resigned.
44. J. PERRIN SMITH, 1895.
45. W. N. RICE, 1896, in place of A. C. GILL, resigned.
46. C. H. SMYTH, JR., 1897.
47. WARREN UPHAM, 1898.

Section F.—Biology, 1882-92.

31. WILLIAM OSLER, 1882, in the absence of C. S. MINOT.
32. S. A. FORBES, 1883.
33. C. E. BESSEY, 1884.
34. J. A. LINTNER, 1885, in place of C. H. FERNALD, resigned.
35. J. C. ARTHUR, 1886.
36. J. H. COMSTOCK, 1887.
37. B. H. FERNOW, 1888.
38. A. W. BUTLER, 1889.
39. J. M. COULTER, 1890.
40. A. J. COOK, 1891.
41. B. D. HALSTED, 1892.

Section F.—Zoölogy.

42. L. O. HOWARD, 1883.
43. JOHN B. SMITH, 1884, in place of WM. LIBBY, JR., resigned.
44. C. W. HARGITT, 1895, in place of S. A. FORBES, resigned.
45. D. S. KELLICOTT, 1896.
46. C. C. NUTTING, 1897.
47. ———, 1898, in place of C. W. STILES, resigned.

SECRETARIES OF THE SECTIONS, CONTINUED.

Section G.—Microscopy, 1882–85.

31. ROBERT BROWN, JR. 1882.
32. CARL SEILER, 1883.
33. ROMYN HITCHCOCK, 1884.
34. W. H. WALMSLEY, 1885.

Section G.—Botany.

42. B. T. GALLOWAY, 1893, in the absence of F. V. COVILLE.
43. CHARLES R. BARNES, 1894.
44. { B. T. GALLOWAY, 1895.
M. B. WAITE, 1895.
45. GEORGE F. ATKINSON, 1896.
46. F. C. NEWCOMBE, 1897.
47. ERWIN F. SMITH, 1898.

Section H.—Anthropology.

31. OTIS T. MASON, 1882.
32. G. H. PERKINS, 1883.
33. G. H. PERKINS, 1884, in the absence of W. H. HOLMES.
34. ERMINNIE A. SMITH,* 1885.
35. A. W. BUTLER, 1886.
36. CHARLES C. ABBOTT, 1887, in absence of F. W. LANGDON.
37. FRANK BAKER, 1888.
38. W. M. BEAUCHAMP, 1889.
39. JOSEPH JASTROW, 1890.
40. W. H. HOLMES, 1891.
41. W. M. BEAUCHAMP, 1892, in place of S. CULIN, resigned.
42. WARREN K. MOOREHEAD, 1893.
43. A. F. CHAMBERLIN, 1894.

44. { STEWART CULIN and W.
W. TOOKER, 1895, in place
of ANITA N. MCGEE, re-
signed.
45. G. H. PERKINS, 1896, in place
of J. G. BOURKE,* deceased.
46. ANITA N. MCGEE, 1897, in place
of HARLAN I. SMITH, resigned.
47. MARSHALL H. SAVILLE, 1898.

*Section I.—Social and Economic
Science.*

31. { FRANKLIN B. HOUGH,* 1882.
J. RICHARDS DODGE, 1882.
32. JOSEPH CUMMINGS,* 1883.
33. CHARLES W. SMILEY, 1884.
34. CHARLES W. SMILEY, 1885, in
absence of J. W. CHICKERING.
35. H. E. ALVORD, 1886.
36. W. R. LAZENBY, 1887.
37. CHARLES S. HILL, 1888.
38. J. RICHARDS DODGE, 1889.
39. B. E. FERNOW, 1890.
40. B. E. FERNOW, 1891.
41. HENRY FARQUHAR, 1892, in
place of L. F. WARD made
Vice-president.
42. NELLIE S. KEDZIE, 1893.
43. MANLEY MILES, 1894.
44. W. R. LAZENBY, 1895, in place
of E. A. ROSS, resigned.
45. R. T. COLBURN, 1896.
46. ARCHIBALD BLUE, 1897.
47. MARCUS BENJAMIN, 1898.

TREASURERS.

1. JEFFRIES WYMAN,* 1848.
2. A. L. ELWYN,* 1849.
3. ST. J. RAVENEL,* 1850, in the
absence of A. L. ELWYN.*
4. A. L. ELWYN,* 1850.
5. SPENCER F. BAIRD,* 1851, in
absence of A. L. ELWYN.*
- 6–7. A. L. ELWYN,* 1851–1853.
8. J. L. LECONTE,* 1854, in ab-
sence of A. L. ELWYN.*
- 9–19. A. L. ELWYN,* 1855–1870.
- 20–30. WILLIAM S. VAUX,* 1871–
1881.
- 32–42. WILLIAM LILLY,* 1882–1893.
- 43–47. R. S. WOODWARD, 1894–98.

COMMONWEALTH OF MASSACHUSETTS.

IN THE YEAR ONE THOUSAND EIGHT HUNDRED AND SEVENTY-FOUR.

AN ACT

TO INCORPORATE THE "AMERICAN ASSOCIATION FOR THE
ADVANCEMENT OF SCIENCE."

Be it enacted by the Senate and House of Representatives, in General Court assembled, and by the authority of the same, as follows:

SECTION 1. Joseph Henry of Washington, Benjamin Pierce of Cambridge, James D. Dana of New Haven, James Hall of Albany, Alexis Caswell of Providence, Stephen Alexander of Princeton, Isaac Lea of Philadelphia, F. A. P. Barnard of New York, John S. Newberry of Cleveland, B. A. Gould of Cambridge, T. Sterry Hunt of Boston, Asa Gray of Cambridge, J. Lawrence Smith of Louisville, Joseph Lovering of Cambridge and John LeConte of Philadelphia, their associates, the officers and members of the Association, known as the "American Association for the Advancement of Science," and their successors, are hereby made a corporation by the name of the "American Association for the Advancement of Science," for the purpose of receiving, purchasing, holding and conveying real and personal property, which it now is, or hereafter may be, possessed of, with all the powers and privileges, and subject to the restrictions, duties and liabilities set forth in the general laws which now or hereafter may be in force and applicable to such corporations.

SECTION 2. Said corporation may have and hold by purchase, grant, gift or otherwise, real estate not exceeding one hundred thousand dollars in value, and personal estate of the value of two hundred and fifty thousand dollars.

SECTION 3. Any two of the corporators above named are hereby authorized to call the first meeting of the said corporation in the month of August next ensuing, by notice thereof "by mail," to each member of the said Association.

SECTION 4. This act shall take effect upon its passage.

HOUSE OF REPRESENTATIVES, March 10, 1874.

Passed to be enacted,

JOHN E. SANFORD, *Speaker*

IN SENATE, March 17, 1874.

Passed to be enacted.

March 19, 1874.

GEO. B. LORING, *President*.

Approved,

W. B. WASHBURN.

SECRETARY'S DEPARTMENT,

Boston, April 3, 1874.

A true copy, Attest:

DAVID PULSIFER,

Deputy Secretary of the Commonwealth.

CONSTITUTION

OF THE

AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE.

Incorporated by Act of the General Court of the Commonwealth of Massachusetts.

OBJECTS.

ARTICLE 1. The objects of the Association are, by periodical and migratory meetings, to promote intercourse between those who are cultivating science in different parts of America, to give a stronger and more general impulse and more systematic direction to scientific research, and to procure for the labors of scientific men increased facilities and a wider usefulness.

MEMBERS, FELLOWS, PATRONS AND HONORARY FELLOWS.

ART. 2. The Association shall consist of Members, Fellows, Patrons, Corresponding Members and Honorary Fellows.

ART. 3. Any person may become a Member of the Association upon recommendation in writing by two members or fellows, and election by the Council. Any incorporated scientific society or institution, or any public or incorporated library, may be enrolled as a member of the Association by vote of the Council by payment of the initiation fee; such society, institution or library may be represented by either the President, Curator, Director or Librarian presenting proper credentials at any meeting of the Association for which the assessment has been paid.

ART. 4. Fellows shall be elected by the Council from such of the members as are professionally engaged in science, or have by their labors aided in advancing science. The election of fellows shall be by ballot and a majority vote of the members of the Council at a designated meeting of the Council.

ART. 5. Any person paying to the Association the sum of one thousand dollars shall be classed as a Patron, and shall be entitled to all the privileges of a member and to all its publications.

ART. 6. Honorary Fellows of the Association, not exceeding three for each section, may be elected; the nominations to be made by the Council and approved by ballot in the respective sections before election by ballot in General Session. Honorary Fellows shall be entitled to all the privileges of Fellows and shall be exempt from all fees and assessments, and entitled to all publications of the Association issued after the date of their election. Corresponding Members shall consist of such scientists not residing in America as may be elected by the Council, and their number shall be limited to fifty. Corresponding Members shall be entitled to all the privileges of members and to the annual volumes of Proceedings published subsequent to their election.

ART. 7. The name of any member or fellow two years in arrears for annual dues shall be erased from the list of the Association, provided that two notices of indebtedness, at an interval of at least three months, shall have been given; and no such person shall be restored until he has paid his arrearages or has been reelected. The Council shall have power to exclude from the Association any member or fellow, on satisfactory evidence that said member or fellow is an improper person to be connected with the Association, or has in the estimation of the Council made improper use of his membership or fellowship.

ART. 8. No member or fellow shall take part in the organization of, or hold office in, more than one section at any one meeting.

OFFICERS.

ART. 9. The officers of the Association shall be elected by ballot by the Nominating Committee from the fellows, and shall consist of a President, a Vice President from each section, a Permanent Secretary, a General Secretary, a Secretary of the Council, a Treasurer, and a Secretary of each Section; these, with the exception of the Permanent Secretary, shall be elected at each meeting for the following one and, with the exception of the Treasurer and the Permanent Secretary, shall not be reëligible for the next two meetings. The term of office of Permanent Secretary shall be five years.

ART. 10. The President, or, in his absence, the senior Vice President present, shall preside at all General Sessions of the Association and at all meetings of the Council. It shall also be the duty of the President to give an address at a General Session of the Association at the meeting following that over which he presided.

ART. 11. The Vice Presidents shall be chairmen of their respective

Sections, and of their Sectional Committees, and it shall be part of their duty to give an address, each before his own section, at such time as the council shall determine. The Vice Presidents may appoint temporary Chairmen to preside over the sessions of their sections, but shall not delegate their other duties. The Vice Presidents shall have seniority in order of their continuous membership in the Association.

ART. 12. The General Secretary shall be the Secretary of all General Sessions of the Association, and shall keep a record of the business of these sessions. He shall receive the records from the Secretaries of the Sections, which, after examination, he shall transmit with his own records to the Permanent Secretary within two weeks after the adjournment of the meeting.

ART. 13. The Secretary of the Council shall keep the records of the Council. He shall give to the Secretary of each Section the titles of papers assigned to it by the Council. He shall receive proposals for membership and bring them before the Council.

ART. 14. The Permanent Secretary shall be the executive officer of the Association under the direction of the Council. He shall attend to all business not specially referred to committees nor otherwise constitutionally provided for. He shall keep an account of all business that he has transacted for the Association, and make annually a general report for publication in the annual volume of Proceedings. He shall attend to the printing and distribution of the annual volume of Proceedings, and all other printing ordered by the Association. He shall issue a circular of information to members and fellows at least three months before each meeting, and shall, in connection with the Local Committee, make all necessary arrangements for the meetings of the Association. He shall provide the Secretaries of the Association with such books and stationery as may be required for their records and business, and shall provide members and fellows with such blank forms as may be required for facilitating the business of the Association. He shall collect all assessments and admission fees, and notify members and fellows of their election, and of any arrearages. He shall receive, and bring before the Council, the titles and abstracts of papers proposed to be read before the Association. He shall keep an account of all receipts and expenditures of the Association, and report the same annually at the first meeting of the Council, and shall pay over to the Treasurer such unexpended funds as the Council may direct. He shall receive and hold in trust for the

Association all books, pamphlets and manuscripts belonging to the Association, and allow the use of the same under the provisions of the Constitution and the orders of the Council. He shall receive all communications addressed to the Association during the intervals between meetings, and properly attend to the same. He shall at each meeting report the names of fellows and members who have died since the preceding meeting. He shall be allowed a salary which shall be determined by the Council, and may employ one or more clerks at such compensation as may be agreed upon by the Council.

ART. 15. The Treasurer shall invest the funds received by him in such securities as may be directed by the Council. He shall annually present to the Council an account of the funds in his charge. No expenditure of the principal in the hands of the Treasurer shall be made without a unanimous vote of the Council, and no expenditure of the income received by the Treasurer shall be made without a two-thirds vote of the Council. The Treasurer shall give bonds for the faithful performance of his duty in such manner and sum as the Council shall from time to time direct.

ART. 16. The Secretaries of the Sections shall keep the records of their respective sections, and, at the close of the meeting, give the same, including the records of subsections, to the General Secretary. They shall also be the Secretaries of the Sectional Committees. The Secretaries shall have seniority in order of their continuous membership in the Association.

ART. 17. In case of a vacancy in the office of the President, one of the Vice Presidents shall be elected by the Council as the President of the meeting. Vacancies in the offices of Vice President, Permanent Secretary, General Secretary, Secretary of the Council, and Treasurer, shall be filled by the Council by ballot. A vacancy in the office of Secretary of a Section shall be filled by nomination and election by ballot in the Section.

ART. 18. The Council shall consist of the past Presidents, and the Vice Presidents of the last meeting, together with the President, the Vice Presidents, the Permanent Secretary, the General Secretary, the Secretary of the Council, the Secretaries of the Sections, and the Treasurer of the current meeting, with the addition of one fellow elected from each Section by ballot on the first day of its meeting. The members present at any regularly called meeting of the Council, provided there are at least five,

shall form a quorum for the transaction of business. The Council shall meet on the day preceding each annual meeting of the Association, and arrange the programme for the first day of the sessions. The time and place of this first meeting shall be designated by the Permanent Secretary. Unless otherwise agreed upon, regular meetings of the Council shall be held in the Council room at 9 o'clock, A.M., on each day of the meeting of the Association. Special meetings of the Council may be called at any time by the President. The Council shall be the board of supervision of the Association, and no business shall be transacted by the Association that has not first been referred to, or originated with, the Council. The Council shall receive and assign papers to the respective sections; examine and, if necessary, exclude papers; decide which papers, discussions and other proceedings shall be published, and have the general direction of the publications of the Association; manage the financial affairs of the Association; arrange the business and programmes for General Sessions; suggest subjects for discussion, investigation or reports; elect members and fellows; and receive and act upon all invitations extended to the Association and report the same at a General Session of the Association. The Council shall receive all reports of Special Committees and decide upon them, and only such shall be read in General Session as the Council shall direct. The Council shall appoint at each meeting the following sub-committees who shall act, subject to appeal to the whole Council, until their successors are appointed at the following meeting: 1, on Papers and Reports; 2, on Members; 3, on Fellows.

ART. 19. The Nominating Committee shall consist of the Council, and one member or fellow elected by each of the Sections. It shall be the duty of this Committee to meet at the call of the President and elect the general officers for the following meeting of the Association. It shall also be the duty of this Committee to fix the time and place for the next meeting. The Vice President and Secretary of each Section shall be recommended to the Nominating Committee by a sub-committee consisting of the Vice President, Secretary, and three members or fellows elected by the Section.

MEETINGS.

ART. 20. The Association shall hold a public meeting annually, for one week or longer, at such time and place as may be determined by vote of the Nominating Committee, and the preliminary arrangements for each meeting shall be made by the Local Committee, in conjunction with the Permanent Secretary and such other persons as the Council may designate.

ART. 21. A General Session shall be held at 10 o'clock, A. M., on the first day of the meeting, and at such other times as the Council may direct.

SECTIONS AND SUBSECTIONS.

ART. 22. The Association shall be divided into Sections, namely:—A, *Mathematics and Astronomy*; B, *Physics*; C, *Chemistry, including its application to agriculture and the arts*; D, *Mechanical Science and Engineering*; E, *Geology and Geography*; F, *Zoölogy*; G, *Botany*; H, *Anthropology*; I, *Social and Economic Science*. The Council shall have power to consolidate any two or more Sections temporarily, and such consolidated Sections shall be presided over by the senior Vice President and Secretary of the Sections comprising it.

ART. 23. Immediately on the organization of a Section there shall be three fellows elected by ballot after open nomination, who, with the Vice President and Secretary and the Vice President and Secretary of the preceding meeting shall form its Sectional Committee. The Sectional Committees shall have power to fill vacancies in their own numbers. Meetings of the Sections shall not be held at the same time with a General Session.

ART. 24. The Sectional Committee of any Section may at its pleasure form one or more temporary Subsections, and may designate the officers thereof. The Secretary of a Subsection shall, at the close of the meeting, transmit his records to the Secretary of the Section.

ART. 25. A paper shall not be read in any Section or Subsection until it has been received from the Council and placed on the programme of the day by the Sectional Committee.

SECTIONAL COMMITTEES.

ART. 26. The Sectional Committees shall arrange and direct the business of their respective Sections. They shall prepare the daily programmes and give them to the Permanent Secretary for printing at the earliest moment practicable. No titles of papers shall be entered on the daily programmes except such as have passed the Council. No change shall be made in the programme for the day in a Section without the consent of the Sectional Committee. The Sectional Committees may refuse to place the title of any paper on the programme; but every such title, with the abstract of the paper or the paper itself, must be returned to the Council with the reasons why it was refused.

ART. 27. The Sectional Committees shall examine all papers and abstracts referred to the Sections, and they shall not place on the programme

any paper inconsistent with the character of the Association; and to this end they have power to call for any paper, the character of which may not be sufficiently understood from the abstract submitted.

PAPERS AND COMMUNICATIONS.

ART. 28. All members and fellows must forward to the Permanent Secretary, as early as possible, and when practicable before the convening of the Association, full titles of all the papers which they propose to present during the meeting, with a statement of the time that each will occupy in delivery, and also such abstracts of their contents as will give a general idea of their nature; and no title shall be referred by the Council to the Sectional Committee until an abstract of the paper or the paper itself has been received.

ART. 29. If the author of any paper be not ready at the time assigned, the title may be dropped to the bottom of the list.

ART. 30. Whenever practicable, the proceedings and discussions at General Sessions, Sections and Subsections shall be reported by professional reporters, but such reports shall not appear in print as the official reports of the Association unless revised by the Secretaries.

PRINTED PROCEEDINGS.

ART. 31. The Permanent Secretary shall have the Proceedings of each meeting printed in an octavo volume as soon after the meeting as possible, beginning one month after adjournment. Authors must prepare their papers or abstracts ready for the press, and these must be in the hands of the Secretaries of the Sections before the final adjournment of the meeting, otherwise only the titles will appear in the printed volume. The Council shall have power to order the printing of any paper by abstract or title only. Whenever practicable, proofs shall be forwarded to authors for revision. If any additions or substantial alterations are made by the author of a paper after its submission to the Secretary, the same shall be distinctly indicated. Illustrations must be provided for by the authors of the papers, or by a special appropriation from the Council. Immediately on publication of the volume, a copy shall be forwarded to every member and fellow of the Association who shall have paid the assessment for the meeting to which it relates, and it shall also be offered for sale by the Permanent Secretary at such price as may be determined by the Council. The Council shall also designate the institutions to which copies shall be distributed.

LOCAL COMMITTEE.

ART. 32. The Local Committee shall consist of persons interested in the objects of the Association and residing at or near the place of the proposed meeting. It is expected that the Local Committee, assisted by the officers of the Association, will make all essential arrangements for the meeting, and issue a circular giving necessary particulars, at least one month before the meeting.

LIBRARY OF THE ASSOCIATION.

ART. 33. All books and pamphlets received by the Association shall be in the charge of the Permanent Secretary, who shall have a list of the same printed and shall furnish a copy to any member or fellow on application. Members and fellows who have paid their assessments in full shall be allowed to call for books and pamphlets, which shall be delivered to them at their expense, on their giving a receipt agreeing to make good any loss or damage and to return the same free of expense to the Secretary at the time specified in the receipt given. All books and pamphlets in circulation must be returned at each meeting. Not more than five books, including volumes, parts of volumes, and pamphlets, shall be held at one time by any member or fellow. Any book may be withheld from circulation by order of the Council. [The Library of the Association was, by vote of the Council in 1895, placed on deposit in the Library of the University of Cincinnati, Ohio. Members can obtain the use of books by writing to the Librarian of the University Library, Cincinnati, Ohio.]

ADMISSION FEE AND ASSESSMENTS.

ART. 34. The admission fee for members shall be five dollars in addition to the annual assessment. On the election of any member as a fellow an additional fee of two dollars shall be paid.

ART. 35. The annual assessment for members and fellows shall be three dollars.

ART. 36. Any member or fellow who shall pay the sum of fifty dollars to the Association, at any one time, shall become a Life Member, and as such, shall be exempt from all further assessments, and shall be entitled to the Proceedings of the Association. All money thus received shall be invested as a permanent fund, the income of which, during the life of the member, shall form a part of the general fund of the Association; but, after his death, shall be used only to assist in original research, unless otherwise directed by unanimous vote of the Council.

ART. 37. All fees and assessments must be paid to the Permanent Secretary, who shall give proper receipts for the same.

ACCOUNTS.

ART. 38. The accounts of the Permanent Secretary and of the Treasurer shall be audited annually, by Auditors appointed by the Council.

ALTERATIONS OF THE CONSTITUTION.

ART. 39. No part of this Constitution shall be amended or annulled, without the concurrence of three-fourths of the members and fellows present in General Session, after notice given at a General Session of a preceding meeting of the Association.

MEMBERS
OF THE
AMERICAN ASSOCIATION
FOR THE
ADVANCEMENT OF SCIENCE.¹

PATRONS.²

THOMPSON, MRS. ELIZABETH, Stamford, Conn. (22).
LILLY, GEN. WILLIAM, Mauch Chunk, Pa. (28). (Died Dec. 1, 1893.)
HERRMAN, MRS. ESTHER, 59 West 56th St., New York, N. Y. (29).

CORRESPONDING MEMBERS.³

Warrington, Robert, F.R.S., Rothamsted, Harpenden, England (40). **C**

MEMBERS.⁴

Abbe, Cleveland, jr., 2017 I St., N. W., Washington, D. C. (44). **E**
Abraham, Abraham, Brooklyn, N. Y. (43).
Adams, C. E., M.D., 29 West Broadway, Bangor, Me. (43). **F**
Alden, John, Pacific Mills, Lawrence, Mass. (36).
Aldis, Owen F., 230 Monadnock Block, Chicago, Ill. (41). **H**
Allderdice, Wm. H., P. A. Engineer, U. S. Navy, care Navy Department,
Washington, D. C. (33). **D**

¹The numbers in parentheses indicate the meeting at which the member was elected. The black letters at the end of line indicate the sections to which members elect to belong. The Constitution requires that the names of all members two or more years in arrears shall be omitted from the list, but their names will be restored on payment of arrearages. Members not in arrears are entitled to the annual volume of Proceedings bound in paper. *The payment of ten dollars at one time entitles a member to the subsequent volumes to which he may be entitled, bound in cloth, or by the payment of twenty dollars, to such volumes bound in half morocco.*

²Persons contributing one thousand dollars or more to the Association are classed as Patrons, and are entitled to the privileges of members and to the publications.

The names of Patrons are to remain permanently on the list.

³See ARTICLE VI of the Constitution.

⁴Any Member or Fellow may become a Life Member by the payment of fifty dollars. The income of the money derived from a Life Membership is used for the general purposes of the Association during the life of the member; afterwards it is to be used to aid in original research. Life Members are exempt from the annual assessment, and are entitled to the annual volume. The names of Life Members are printed in small capitals in the regular list of Members and Fellows.

- Allen, Miss Augusta A., 42 Coulter St., Germantown, Pa. (44). **G**
 Allen, J. M., Hartford, Conn. (22). **D**
 Allen, John Robins, 18 S. Ingalls St., Ann Arbor, Mich. (45). **B D**
 Allen, Walter S., 34 S. Sixth St., New Bedford, Mass. (39). **C I**
 Anderson, Alexander P., Botanist, Clemson College, S. C. (45). **G**
 Anderson, Frank P., Epworth, Iowa (46).
 Andrews, Wm. C., care Claflin Thayer & Co., P. O. Box 2000, New York,
 N. Y. (46).
 Appleton, Rev. Edw. W., D.D., Ashbourne, Montgomery Co., Pa. (28).
 Archambault, U. E., P. O. Box 1944, Montreal, P. Q., Can. (31).
 Atkinson, Jno. B., Earlington, Hopkins Co., Ky. (26). **D**
 Atwood, Dr. Charles, Moravia, N. Y. (45). **G**
 AVERY, SAMUEL P., 4 E. 38th St., New York, N. Y. (36).
 Ayer, Edward Everett, Room 12, The Rookery, Chicago, Ill. (37). **H**
 Ayres, Horace B., Carlton, Minn. (40).
 Backus, Truman J., LL.D., Pres. Packer Institute, Brooklyn, N. Y. (43).
 Baker, A. G., Springfield, Mass. (44).
 Baker, O. M., 499 Main St., Springfield, Mass. (44).
 Balch, Samuel W., Yonkers, N. Y. (43).
 Balderston, C. Canby, 35 S. Tenth St., Philadelphia, Pa. (33). **B**
 Baldwin, Mrs. G. H., 3 Madison Ave., Detroit, Mich. (34). **H**
 Baldwin, Herbert B., 906 Broad St., Newark, N. J. (43).
 Baldwin, Prof. J. Mark, Princeton Univ., Princeton, N. J. (46). **H**
 Bancroft, Alonzo C., Elma, Erie Co., N. Y. (41).
 Banes, Charles H., 1107 Market St., Philadelphia, Pa. (31). **D**
 BANGS, LEMUEL BOLTON, M.D., 127 E. 34th St., New York, N. Y. (36).
 Bannan, John F., North Andover, Mass. (44). **C**
 Barber, D. H., P. O. Box 83, Springfield, Linn Co., Iowa (37).
 Barbour, Prof. Ervin H., Univ. of Nebraska, Lincoln, Neb. (45). **E**
 Bardwell, Elisabeth M., Mt. Holyoke College, South Hadley, Mass. (46).
 BARGE, B. F., Mauch Chunk, Pa. (33).
 Barker, Mrs. Martha M., 26 Eleventh St., Lowell, Mass. (31). **E H**
 Barker, Mrs. Mary E., Collinsville, Conn. (45).
 Barnett, Miss Katie Porter, Madison, Georgia (44). **A H**
 Barnhart, Arthur M., 185 Monroe St., Chicago, Ill. (42).
 Barton, G. E., 27 Main St., Millville, N. J. (46). **C**
 Barton, Prof. Samuel M., Kernstown, Va. (43). **A**
 Barwell, John William, Waukegan, Ill. (47).
 Bashore, Dr. Harvey B., West Fairview, Pa. (46). **E**
 Bates, George Williams, 32033 Buhl Block, Detroit, Mich. (46). **H I**
 Bates, Miss Octavie Williams, A.B., LL.M., 53 Baggs St., Detroit, Mich.
 (47). **I**
 Batterson, J. G., Hartford, Conn. (23).
 Bausch, Henry, P. O. Drawer 1033, Rochester, N. Y. (41).
 Baxter, James N., care H. E. and C. Baxter, cor. Division and Bedford Sts.,
 Brooklyn, N. Y. (36).

Beach, Spencer Ambrose, N. Y. Experiment Station, Geneva, N. Y. (41).

G

Bean, Thos. E., Box 441, Galena, Ill. (28). **F**

Becher, Franklin A., 406 Irving Place, Milwaukee, Wis. (41). **I A**

Beckwith, Miss Florence, 394 Alexander St., Rochester, N. Y. (45). **G**

Bell, Miss Clara, Springfield, Mass. (43).

BELL, C. M., M.D., 320 Fifth Ave., New York, N. Y. (36).

Benneson, Miss Cora Agnes, A.M., LL.B., 4 Mason St., Cambridge, Mass. (47). **I H**

Bennett, Henry C., 256 W. 42nd St., New York, N. Y. (43).

Benneville, James S. de, 123 S. 7th St., Philadelphia, Pa. (46). **C**

Bevier, Miss Isabel, Plymouth, Ohio (46). **C**

Bickford, Miss Elizabeth E., Ph.D., Vassar College, Poughkeepsie, N. Y. (46). **F**

Biddle, James G., 944 Drexel Building, Philadelphia, Pa. (39).

Bien, Julius, 140 Sixth Ave., New York, N. Y. (34). **E H**

Bigelow, Willard Dell, Chem. Div., Dept. of Agric., Washington, D. C. (44). **C**

Biggar, Hamilton F., M.D., 176 Euclid Ave., Cleveland, Ohio (40). **B F**

Billings, Edgar F., 165 High St., Boston, Mass. (44). **C**

BISHOP, HEBER R., Mills Building, New York, N. Y. (36).

Bitting, Prof. A. W., Purdue Univ., Lafayette, Ind. (46.)

Blair, Mrs. Helen Quinche, The Ortiz, East Fourth and Sycamore Sts., Cincinnati, Ohio (40). **C**

Bleile, Albert M., M.D., 342 S. Fourth St., Columbus, Ohio (37). **F**

BLISH, W. G., Niles, Mich. (33). **B D**

Blount, Henry Fitch, "The Oaks," Washington, D. C. (32). **I B**

Bodine, Donaldson, Prof. of Zoölogy and Geology, Wabash College, Crawfordsville, Ind. (45). **E F**

Bogue, Rev. Horace P. V., Avon, N. Y. (41). **H I**

Bohannon, Prof. Rosser Daniel, Ohio State University, Columbus, Ohio (46). **A**

Booraem, J. V. V., 204 Lincoln Place, Brooklyn, N. Y. (36).

Borner, William, The Majestic, 52 and 54 Walton Place, Chicago, Ill. (44).

Boutwell, John Mason, 10 Weld Hall, Cambridge, Mass. (46). **E**

Bowker, R. R., 28 Elm St., New York, N. Y. (43). **B**

Boyd, David, A.M., Greeley, Col. (46). **I**

Boyd, James E., Albion, Mich. (46). **B**

Boynton, May O., Ph.B., 69 North Prospect St., Burlington, Vt. (44). **C**

BRACKENRIDGE, GEO. W., San Antonio, Texas (41). **I**

Brackett, Byron B., Ph.D., 722 Union St., Schenectady, N. Y. (46). **B**

BRADLEY, ARTHUR C., Newport, N. H. (43).

Bradley, Charles S., 44 Broad St., New York, N. Y. (40).

BRADLEY, M. J., 36 Hart St., Brooklyn, N. Y. (43).

BRADLEY, MILTON, Springfield, Mass. (44). **B**

Bramwell, Geo. W., 335 Broadway, New York, N. Y. (43). **D**

Brayton, Miss Sarah H., M.D., Evanston, Ill. (33).

- Brewster, Mrs. Mary S., Mountainville, Orange Co., N. Y. (43).
 Brice, Judge Albert G., 19 Camp St., New Orleans, La. (32). **H**
 Briggs, Thomas B., 115 E. 73d St., New York, N. Y. (43).
 Brigham, Prof. Albert P., Hamilton, Madison Co., N. Y. (41).
 Britton, Wiley (40). **F**
 Brooks, Prof. Wm. P., Amherst, Mass. (38). **CF**
 Brown, Samuel B., Morgantown, W. Va. (40). **E**
 Brownell, Silas B., 71 Wall St., New York, N. Y. (36).
 Browning, Philip Embury, Kent Chemical Laboratory, Yale University, New Haven, Conn. (46). **C**
 Brundage, Albert H., Ph.G., M.D., 1153 Gates Ave., Brooklyn, N. Y. (43).
F G H
 Bryant, Miss D. L., 998 Spring Garden St., Greensboro, N. C. (42). **E**
 Buckingham, Chas. L., 195 Broadway, New York, N. Y. (28).
 Buffum, Prof. Burt C., State University, Laramie, Wyo. (42). **G**
 Bull, Prof. Storm, Madison, Wis. (44). **D**
 Burke, Arthur N., A.B., Principal of Monson Academy, Monson, Mass. (44).
 Burr, Mrs. Laura E., Commercial Hotel, Lansing, Mich. (34). **B**
 Burt, Milo Cudworth, Amherst, Mass. (44). **C**
 Burton, Prof. Alfred E., Massachusetts Institute of Technology, Boston, Mass. (40). **E**
 Burwell, Arthur W., Ph.D., 208 Superior St., Cleveland, Ohio (37).
 Caldwell, Prof. Frank C., Ohio State University, Columbus, Ohio (46). **BD**
 Calkins, Dr. Marshall, Springfield, Mass. (29).
 Calvert, Prof. Sidney, M.A., University of Missouri, Columbia, Mo. (47).
C
 Cannon, George L., jr., High School, Denver, Col. (39). **F H**
 Card, Fred W., Kingston, R. I. (45). **G**
 Carpenter, Ford A., U. S. Weather Bureau, San Diego, Cal. (44). **B**
 Carpenter, Geo. O., Jr., care St. Louis Lead and Oil Co., St. Louis, Mo. (29).
 CARTER, JAMES C., 277 Lexington Ave., New York, N. Y. (36).
 Carter, John E., Knox and Coulter Sts., Germantown, Pa. (33). **B H**
 Carter, Prof. Truman Post, 872 Grove St., Jacksonville, Ill. (46). **F G**
 Cary, Albert A., 28 Cliff St., New York, N. Y. (36). **D**
 Cary, Mrs. Elizabeth M. L., Buffalo, N. Y. (45). **E**
 Chadbourn, Erlon R., Lewiston, Me. (29).
 Chandler, Richard E., The University of Nebraska, Lincoln, Neb. (46).
B D
 Chaney, Prof. Lucian W., Jr., Carleton College, Northfield, Minn. (45).
 Chase, R. Stuart, 53 Summer St., Haverhill, Mass. (18). **F**
 Child, C. D., Ithaca, N. Y. (44). **B**
 Chrystie, Wm. F., Hastings-on-Hudson, New York, N. Y. (36).
 Church, Royal Tyler, Turin, Lewis Co., N. Y. (38). **DF**
 Clancy, Michael Albert, 1426 Corcoran St., Washington, D. C. (40). **H**
 Clapp, Geo. H., 116 Water St., Pittsburg, Pa. (33). **H C**

- Clark, Alex. S., Westfield, N. J. (33).
 Clark, John S., 646 Washington St., Boston, Mass. (31). **I B C**
 Clark, Joseph E., M.D., 396 Fourth St., Brooklyn, N. Y. (43). **A E**
 Clark, Oliver Durfee, 590 Halsey St., Brooklyn, N. Y. (41). **F E**
 Clark, S. Wellman, M.D., 110 Mercer St., Jersey City, N. J. (44). **H**
 Clark, Thomas H., 22 Lancaster St., Worcester, Mass. (40).
 Clark, Wm. Brewster, M.D., 50 E. 31st St., New York, N. Y. (33). **F C**
 Claypole, Dr. Agnes M., Wellesley, Mass. (46).
 Claypole, Miss Edith J., Wellesley, Mass. (46).
 Clough, Albert L., S.B., Box 14, Manchester, N. H. (45). **B**
 Cluett, J. W. Alfred, Troy, N. Y. (43).
 Coates, Prof. Charles E., Ph.D., University of Louisiana, Baton Rouge, La. (46). **C**
 Cobleigh, Wm. Merriam, E.M., Bozeman, Mont. (45). **C**
 COE, HENRY W., M.D., "The Marquam," Portland, Oregon (32). **H F**
 Coit, J. Milner, Ph.D., Saint Paul's School, Concord, N. H. (33). **B C E**
 Colgate, Abner W., Morristown, N. J. (44).
 Colie, Edw. M., East Orange, N. J. (30). **E I**
 Collie, Prof. Geo. L., Beloit College, Beloit, Wis. (42). **E**
 Collin, Rev. Henry P., Coldwater, Mich. (37). **H**
 Colton, Buel P., Normal, McLean Co., Ill. (34). **F**
 Comstock, Dr. T. Griswold, 3401 Washington Ave., St. Louis, Mo. (29).
F H
 Conant, Miss E. Ida, 42 W. 48th St., New York, N. Y. (33). **H I F**
 Conklin, Prof. Roland E., A.M., Eureka College, Eureka, Ill. (42). **F**
 Cook, Dr. Charles D., 162 Remsen St., Brooklyn, N. Y. (25).
 Cook, Melville T., Greencastle, Ind. (45). **G**
 Cope, Thos. P., Awbury, Germantown, Pa. (33). **I**
 Copeland, Edwin Bingham, Monroe, Wis. (45). **G**
 Corbitt, James H., University of Virginia, Charlottesville, Va. (44).
 Corcoran, Dr. Luke, Maple St., Springfield, Mass. (44). **H**
 Cornman, Oliver P., 2252 N. 20th St., Philadelphia, Pa. (46). **H**
 Courtis, William Munroe, 449 Fourth Ave., Detroit, Mich. (46). **E C G**
 Cowell, Jno. F., Buffalo, N. Y. (35).
 Cowles, James Lewis, Farmington, Conn. (44).
 Cox, Charles F., Pres. Council Scientific Alliance of New York, Grand Central Depot, New York, N. Y. (43).
 Crafts, Robert H., 2329 S. 6th St., Minneapolis, Minn. (32). **I B**
 Craig, John, 16 South Geneva St., Ithaca, N. Y. (41).
 Crawford, John, Leon, Nicaragua, C. A. (40). **E H**
 Crawley, Edwin S., Ph.D., Springfield Ave., Chestnut Hill, Philadelphia, Pa. (45).
 CROWELL, A. F., Woods Holl, Mass. (30). **C**
 Cruikshank, James, LL.D., 206 S. Oxford St., Brooklyn, N. Y. (36).
 Cunningham, Francis A., 1613 Wallace St., Philadelphia, Pa. (33). **D E B**
 Cunningham, Prof. Susan J., Swarthmore College, Swarthmore, Pa. (38).

- Cuntz, Johannes H., 325 Hudson St., Hoboken, N. J. (36).
 Curtis, William E., Post Building, Washington, D. C. (40). **H I**
 Cutler, Dr. Andrew S., Kankakee, Ill. (32). **I E**
- Dall, Mrs. Caroline H., Washington, D. C. (46).
 DALY, HON. CHARLES P., 84 Clinton Place, New York, N. Y. (36). **E H**
 Dana, Charles L., 50 W. 46th St., New York, N. Y. (46). **H**
 Davenport, Charles Benedict, Ph.D., 11 Francis Ave., Cambridge, Mass. (46).
 Davenport, Prof. Eugene, Dean of the College of Agriculture, University of Illinois, Champaign, Ill. (39).
 Davidson, R. J., Experiment Station, Blacksburgh, Va. (40). **C**
 Davis, Abial B., A.M., 129 East Lincoln Ave., Mt. Vernon, N. Y. (44). **A**
 DAVIS, ANDREW MCFARLAND, 10 Appleton St., Cambridge, Mass. (35). **H**
 Davis, Prof. Charles A., Alma, Mich. (46). **G**
 Davis, J. J., M.D., 1119 College Ave., Racine, Wis. (31). **F G**
 Davison, John M., 60 Oxford St., Rochester, N. Y. (38). **C**
 Dean, Seth, Glenwood, Iowa (34). **D**
 Deeds, Edward A., Denison University, Granville, Ohio (45). **B**
 Deghuée, Joseph A., 247 Harrison St., Brooklyn, N. Y. (40). **C**
 Delafield, Maturin L., jr., Fieldston, Riverdale, New York, N. Y. (43). **G**
 Dewey, L. H., Dep't of Agriculture, Washington, D. C. (40). **F G**
 Dinsmore, Prof. Thos. H., Jr., Emporia, Kan. (29). **B C**
 Dixon, Roland B., Peabody Museum, Cambridge, Mass. (46). **H**
 Dodge, Chas. Wright, M.S., Univ. of Rochester, Rochester, N. Y. (39). **F**
 Dodge, Philip T., Tribune Building, New York, N. Y. (44). **B D**
 Dorsey, N. Ernest, Ph.D., Annapolis Junction, Md. (46). **B**
 Doty, P. A., 168 Broadway, Long Branch, N. J. (43). **D**
 Doughty, John W., 165 Johnston St., Newburgh, N. Y. (19). **E**
 Drescher, Willibald A. E., P. O. Drawer 1033, Rochester, N. Y. (41). **F**
 Drummond, Isaac Wyman, Ph.D., 436 W. 22nd St., New York, N. Y. (36).
 Duffy, Rev. James S., 474 Sackett St., Brooklyn, N. Y. (43).
 Duggar, Benjamin Minge, Cornell University, Ithaca, N. Y. (45).
 Du Prè, Prof. Daniel A., Saluda, N. C. (28). **B C E**
 Durand, Elias J., D.S., Cornell University, Ithaca, N. Y. (41). **G**
 Durfee, Prof. William Pitt, Ph.D., Hobart College, Geneva, N. Y. (46). **A**
 Durkee, Esther M., M.D., 1139 Third Ave., Detroit, Mich. (46).
 Dyer, Harrison G., A.M., Ph.D., U. S. National Museum, Washington, D. C. (43).
 Dyer, Clarence M., Lawrence, Mass. (22).
- Edelheim, Carl, 253-259 N. Broad St., Philadelphia, Pa. (33).
 Edgar, Clinton G., Detroit Gas Co., Detroit, Mich. (46).
 Edson, Hubert, Patterson, La. (40).
 Edwards, W. F., 535 Boylston St., Seattle, Wash. (33). **B C**
 Ekeley, Prof. John B., The Cathedral School of Saint Paul, Garden City, L. I. (42). **C**
 ESTES, DANA, Brookline, Mass. (29). **I H**

- Evans, Alexander W., M.D., 12 High St., New Haven, Conn. (45). **G**
 Evans, Samuel G., 211 Main St., Evansville, Ind. (39). **F**
 Everett, Edward, 29 Waumbeck St., Roxbury, Mass. (47). **B D E**
 Evers, Edward, M.D., 1861 N. Market St., St. Louis, Mo. (28). **F H**
- Fairchild, B. T., P. O. Box 1120, New York, N. Y. (36).
 Falconer, William, Schenley Park, Pittsburgh, Pa. (29).
 Farwell, Oliver A., 1225 Jefferson Ave., Detroit, Mich. (46). **G**
 Farwell, Robert Benneson, C. E., 53 Monument Ave., Charlestown, Mass. (47). **D**
 Fassig, Oliver Lanard, Johns Hopkins University, Baltimore, Md. (46). **B**
 Fearey, Thomas Healey, 901 D. S. Morgan Building, Buffalo, N. Y. (45). **B**
 Felt, Ephraim Porter, Northboro, Mass. (44). **F**
 Fernald, F. A., 72 Fifth Ave., New York, N. Y. (43). **C**
 Fielding, Frank E., Virginia City, Storey Co., Nev. (46).
 Fink, Prof. Bruce, Upper Iowa University, Fayette, Iowa (45). **E F**
 Fireman, Peter, Ph.D., Columbian University, Washington, D. C. (45).
 Fisher, Geo. E., 37 and 39 Wall St., New York, N. Y. (37).
 Fitz, George W., M.D., 7 Scott St., Cambridge, Mass. (47). **H**
 Flanders, Charles S., Franklin, Mass. (42). **E**
 Floods, Rev. Robert John, Sc.M., S.T.B., South Ashburnham, Mass. (44). **H**
 Flynn, Henry Franklin, C. and G. Survey Office, Washington, D. C. (47). **A**
 Flynn, Oscar R., Columbus, Ohio (46). **C**
 Focke, Theodore M., 80 S. Professor St., Oberlin, Ohio (44). **B**
 Foley, Prof. Arthur Lee, Indiana University, Bloomington, Ind. (46). **B**
 Folkmar, Daniel, care of Geo. Cuddeback, Whitewater, Wis. (46). **H**
 Forwood, Dr. W. H., Soldiers' Home, Washington, D. C. (40).
 Francis, Jno. Miller, Director Chemical Dep't, Parke, Davis & Co., 784 Congress St. E., Detroit, Mich. (46). **C**
 Frankforter, Prof. Geo. B., University of Minnesota, Minneapolis, Minn. (43). **C**
 Freeman, Prof. T. J. A., Woodstock College, Howard Co., Md. (33). **B C**
 Freley, Prof. Jasper Warren, Wells College, Aurora, Cayuga Co., N. Y. (45). **B E**
 Fretz, Dr. John Edgar, Doylestown, Bucks Co., Pa. (46). **F G H**
 Frick, Prof. John H., Central Wesleyan Coll., Warrenton, Mo. (27). **E F B A**
 Fries, Dr. Harold H., 92 Reade St., New York, N. Y. (40). **C**
 Frisbie, J. F., M.D., Box 455, Newton, Mass. (29). **E H**
 FROTHINGHAM, MRS. LOIS R., Milton, Mass. (31). **F A I**
 Fuller, Chas. G., M.D., 38 Central Music Hall, Chicago, Ill. (35). **F**
 Fuller, Melville W., LL.D., Chief Justice U. S., 1800 Massachusetts Ave., Washington, D. C. (40).
 Furbish, Miss Kate, 13 Lincoln St., Brunswick, Me. (44). **G**
- Gable, George D., Ph.D., Parsons College, Fairfield, Iowa (40). **A B**
 Galloway, Prof. Thomas Walton, Missouri Valley College, Marshall, Mo. (45). **F G**

- Gardner, Rev. Corliss B., Ripley, N. Y. (29). **ABI**
- GARLAND, JAMES, 2 Wall St., New York, N. Y. (36).
- Garnier, Madame Laure Russell, 715 Fifth Ave., New York, N. Y. (40).
- Gault, Franklin B., University of Idaho, Moscow, Idaho (43).
- Gause, Frederick T., 128 Pearl St., New York, N. Y. (40).
- Gay, Miss E. Jane, 214 1st St., S. E., Washington, D. C. (44). **H**
- GENTH, FRED. A., Lansdowne, Del. Co., Pa. (32). **CE**
- Gerrodette, Frank Honoré, 9 W. 31st St., New York, N. Y. (45). **HEI**
- Getman, Frederick H., 196 Atlantic St., Stamford, Conn. (45). **B**
- GLENNY, WILLIAM H., JR., Buffalo, N. Y. (25).
- Glover, James Waterman, Ph.D., 44 Kingsley St., Ann Arbor, Mich. (46). **A**
- Goldsborough, W. E., M.E., 164 Columbia St., Lafayette, Ind. (44). **D**
- Goodman, Miss Marie L., Westport, Mo. (46).
- Goodnow, Henry R., 95 Riverside Drive, New York, N. Y. (32). **B**
- Goodridge, E. A., M.D., 85 Maine St., Flushing, N. Y. (36).
- Goodspeed, Arthur Willis, A.B., Ph.D., University of Pennsylvania, Philadelphia, Pa. (47). **AB**
- Gould, Sylvester C., Manchester, N. H. (22). **ABEH**
- Grabau, Amadeus W., S.B., Mass. Inst. Technology, Boston, Mass. (45).
- Graef, Edw. L., 58 Court St., Brooklyn, N. Y. (28). **F**
- Green, Edgar Moore, M.D., Easton, Pa. (36). **CGH**
- Greene, Prof. Edward Lee, Catholic University of America, Washington, D. C. (42). **G**
- Greene, G. K., 195 West 1st St., New Albany, Ind. (38).
- Greene, Jacob L., President Mut. Life Insurance Co., Hartford, Conn. (23).
- Greene, Jeannette B., M.D., Sci.D., F.E.C., 56 W. 55th St., New York, N. Y. (33). **FEC**
- Greene, J. Evarts, 98 Lincoln St., Worcester, Mass. (47). **I**
- Green, Milbrey, M.D., 567 Columbus Ave., Boston, Mass. (29).
- Greenleaf, John T., Owego, N. Y. (33). **F**
- Greve, Theodor L. A., M.D., 260 W. 8th St., Cincinnati, Ohio (30)
- Grindley, Harry Sands, 918 W. Green St., Urbana, Ill. (46). **C**
- Grower, George G., Ansonia, Conn. (43). **BD**
- Gruener, Hippolyte, Adelbert College, Cleveland, Ohio (44).
- Gulliver, F. P., St. Marks School, Southboro, Mass. (40). **E**
- Gurley, Wm. F. E., Danville, Vermilion Co., Ill. (37). **E**
- Haffner, Miss Netta W., Sturgis, Mich., (46). **C**
- Hagar, Stansbury, 372 Washington Ave., Brooklyn, N. Y. (43).
- Haight, Stephen S., C.E., 1266 Clover St., West Farms, New York, N. Y. (31). **D**
- Hale, George D., 409 Lake Ave., Rochester, N. Y. (41).
- Hall, James P., 6 Poplar St., Brooklyn, N. Y. (40). **AB**
- Hall, Winfield S., M.D., Northwestern University Medical School, 2421-2431 Dearborn St., Chicago, Ill. (40).
- Hammond, Mrs. Eliza F., 645 Jefferson Ave., Detroit, Mich. (46.)
- Harmon, Miss A. Maria, 171 Maclaren St., Ottawa, Ontario, Can. (31). **HF**

Harper, Prof. Charles A., Columbia University, Havemeyer Hall, New York, N. Y. (40). **C**

Harper, Henry Winston, M.D., Univ. of Texas, Austin, Texas (45). **C**

Harrington, Prof. Mark W., Mt. Vernon, N. Y. (40). **B**

Harris, Miss Emma G., Woonsocket, R. I. (44). **HFE**

Harris, I. H., Waynesville, Warren Co., Ohio (30). **EH**

Hart, C. Porter, M.D., Wyoming, Hamilton Co., Ohio (30). **F**

Hart, Rev. Prof. Samuel, Trinity College, Hartford, Conn. (22). **A**

Hartz, J. D. Aug., College Point, N. Y. (43).

Hayford, John F., C. E., 1514 Howard Ave., Washington, D. C. (46). **ABD**

Haynes, Prof. Arthur E., Univ. of Minnesota, Minneapolis, Minn. (45).

Hays, Joseph A., Ph.G., 147 S. 18th St., Pittsburgh, Pa. (44). **BCGH**

Hays, Prof. Willet M., Saint Anthony Park, Saint Paul, Minn. (45).

Haywood, Prof. John, Otterbein University, Westerville, Ohio (30). **AB**

Head, W. R., 5467 Jefferson Ave., Hyde Park, Chicago, Ill. (38). **F**

Hedge, Fred. H., Public Library, Lawrence, Mass. (28). **FH**

Hendricks, Henry H., 49 Cliff St., New York, N. Y. (30).

Henry, Chas. C., M.D., 56 Clark St., Brooklyn, N. Y. (43).

Hertzberg, Prof. Constantin, 181 S. Oxford St., Brooklyn, N. Y. (29).

BF

HEXAMER, C. JOHN, C.E., 419 Walnut St., Philadelphia, Pa. (33). **CB**

Heyer, Wm. D., 523 South Broad St., Elizabeth, N. J. (33). **BD**

Hice, Richard R., Beaver, Beaver Co., Pa. (41). **E**

Higley, Warren, 71 Broadway, New York, N. Y. (43).

Hinton, John H., M.D., 41 W. 32nd St., New York, N. Y. (29). **FH**

Hitchcock, Miss Fanny R. M., 4038 Walnut St., Philadelphia, Pa. (35). **F**

Hoadley, Geo. A., A.M., Swarthmore College, Swarthmore, Pa. (40).

Hobbs, Prof. Perry L., Western Reserve Medical College, Cleveland, Ohio (41). **C**

Hodge, J. M., Big Stone Gap, Va. (29). **DE**

Hodges, Julia, 139 W. 41st St., New York, N. Y. (36). **EFH**

Hodskins, Miss G. A., Springfield, Mass. (44). **FG**

HOE, MRS. R., JR., 11 E. 36th St., New York, N. Y. (36).

Hoe, Mrs. Richard M., 11 E. 71st St., New York, N. Y. (36).

Hoffman, Very Rev. Eugene Aug., D.D., Dean of General Theological Seminary, 426 W. 23d St., New York, N. Y. (36).

Hogeboom, Miss Ellen C., Shelbyville, Ky. (46). **C**

Holden, E. F., 530 W. Onondaga St., Syracuse, N. Y. (43). **A**

HOLDEN, MRS. L. E., The Hollenden, Cleveland, Ohio (35).

Hollinshead, Warren H., Vanderbilt University, Nashville, Tenn. (37).

Holmes, W. Newton, Pritchett School Institute, Glasgow, Mo. (36).

Holt, Henry, 29 W. 23d St., New York, N. Y. (29).

Holton, Henry D., Brattleboro, Vt. (44). **I**

Homer, Chas. S., jr., of Valentine & Co., 245 Broadway, New York, N. Y., (29).

Hood, Gilbert E., Lawrence, Mass. (29). **HEB**

Hood, William, 512 Van Ness Ave., San Francisco, Cal. (35). **D**

Hooker, Prof. Henrietta E., Mt. Holyoke College, South Hadley, Mass. (45). **G**

Hooper, Prof. Franklin W., Curator Brooklyn Inst., Brooklyn, N. Y. (43).

Hopkins, A. D., Experiment Station, Morgantown, W. Va. (42). **F**

Hopkins, Prof. A. J., Amherst College, Amherst, Mass. (44). **C**

Hopkins, Grant S., Ithaca, N. Y. (41). **F**

Hopkins, Thos. C., Geologist, State College, Centre Co., Pa. (38). **E**

Hoskins, William, La Grange, Cook Co., Ill. (34). **C**

Hotchkiss, Homer J., Cornell University, Ithaca, N. Y. (45). **B**

Hough, Romeyn B., Lowville, N. Y. (37).

Howe, Lucien, M.D., 183 Delaware Ave., Buffalo, N. Y. (45).

Hudson, George H., Plattsburgh, Clinton Co., N. Y. (31). **F**

Hume, Alfred, C. E., University, Miss. (39). **A**

Humphrey, Daniel, M.D., Lawrence, Mass. (18). **F H**

Hungerford, W. S., care W. Ames & Co., Jersey City, N. J. (43). **D**

Hunter, Prof. Joseph Rufus, Richmond College, Richmond, Va. (45). **G**

Huntington, F. W., Montclair, N. J. (45). **B**

Hurd, E. O., Plainville, Hamilton Co., Ohio (30). **E F**

Hyde, B. T. B., 20 W. 53d St., New York, N. Y. (43). **D**

Hyde, E. Francis, 835 Fifth Ave., New York, N. Y. (43). **A**

Hyde, Frederick E., M.D., 20 W. 53d St., New York, N. Y. (43). **E**

Hyde, Frederick E., jr., 20 W. 53d St., New York, N. Y. (43). **H**

ILES, GEORGE, 5 Brunswick St., Montreal, Can. (31). **I**

Ingham, Wm. A., 320 Walnut St., Philadelphia, Pa. (33). **E**

Innes, Murray, care O. D. Copper Mining Co., Globe, Arizona (45).

Irwell, Lawrence, 76 W. Tupper St., Buffalo, N. Y. (45). **F**

Ives, Frederick E., 2750 N. 11th St., Philadelphia, Pa. (44). **B**

James, Bashrod W., M.D., N. E. cor. 18th and Green Sts., Philadelphia, Pa. (29). **F**

James, Charles C., M. A., Dep't of Agriculture, Toronto, Ontario, Can. (46). **I**

Jefferis, Wm. W., 1614 Green St., Philadelphia, Pa. (33). **E**

Jenks, Wm. H., Brookville, Pa. (38).

Jenner, Charles H., Prof. of Natural and Applied Sciences, Brockport, N. Y. (41). **A B D**

Jennings, Walter L., 900 Beacon St., Boston, Mass. (45).

Jewett, Dr. Frederic A., 282 Hancock St., Brooklyn, N. Y. (43).

Johnson, Miss Isabel L., 467 Mass. Ave., Boston, Mass. (47). **E**

Johnson, Nels, Manistee, Mich. (41). **A B**

Johnson, Roswell Hill, 234 Highland Ave., Buffalo, N. Y. (44). **F H G**

Jones, Prof. Frederick S., Univ. of Minnesota, Minneapolis, Minn. (45).

Jordan, Whitman H., Director N. Y. Agricultural Experiment Station, Geneva, N. Y. (45).

Kahlenberg, Louis, Ph.D., 306 Lake St., Madison, Wis. (46). **C**

Kastle, Prof. J. H., State College of Kentucky, Lexington, Ky. (45). **C**

- Kedzie, John H., Evanston, Ill. (34). **B**
 Keeler, Aaron Benedict, Ridgefield, Conn. (45) **I**
 Keith, Prof. Marcia A., Mount Holyoke College, South Hadley, Mass. (46) **B**
 Keith, Walter J., Ph.D., State College, Pa. (44). **C**
 Kelley, John Harris, Chamber of Commerce (7th Floor), Nashville, Tenn. (44). **C**
 Kellogg, David S., M.D., Plattsburgh, N. Y. (29). **H**
 Kellogg, John H., M.D., Battle Creek, Mich. (24). **F**
 Kelsey, Rev. F. D., Sc.D., Toledo, Ohio (46).
 Kelsey, Harlan Page, 1150 Tremont Building, Boston, Mass. (47). **G**
 Kennedy, Dr. George Golding, Roxbury, Mass. (40). **F**
 KENNEDY, HARRIS, 284 Warren St., Roxbury, Mass. (40). **E F**
 Kern, Josiah Quincy, Ph.D., P. O. Box 265, Treasury Dep't, Washington, D. C. (40). **I**
 Kinder, Miss Sarah A., 28 Lockerbie St., Indianapolis, Ind. (39). **H**
 King, A. F. A., M.D., 1315 Massachusetts Ave., N. W., Washington, D. C. (29). **F H**
 King, Miss Ada M., 8 Briggs Place, Rochester, N. Y. (39). **E I**
 King, Miss Harriet M., Salem, Mass. (28).
 Kingsbury, Prof. Albert, Durham, N. H. (43). **D**
 Kingsbury, Benj. F., Ithaca, N. Y. (45). **F**
 Kinner, Hugo, M.D., 1103 Rutger St., St. Louis, Mo. (21). **F H**
 Kirkpatrick, Walter G., 2102 West End Ave., Nashville, Tenn. (41).
 Kittredge, Miss H. A., North Andover, Mass. (37). **F**
 Klie, G. H. Carl, M.D., 5100 N. Broadway, St. Louis, Mo. (39). **C F**
 Knapp, G. N., Prairie du Sac, Wis. (46). **G H**
 Kneeland, Stillman F., LL.D., 110 Berkeley Pl., Brooklyn, N. Y. (43). **I**
 Knight, Prof. Charles M., 219 S. Union St., Akron, Ohio (29). **C B**
 Knipp, Charles Tobias, Indiana University, Bloomington, Ind. (46). **B**
 Knox, Wilm, Society for Savings Building, Cleveland, Ohio (38).
 Koues, Miss Elizabeth L., The Cathedral School of Saint Mary, Garden City, N. Y. (41). **I**
 Krácsy, Prof. Béla, Győr, Hungary (41). **C**
 Kuhne, F. W., 19 Court St., Fort Wayne, Ind. (38). **A F**
- La Forge, Lawrence, Alfred University Observ., Alfred, N. Y. (43).
 Lampard, Henry, 102 Shuter St., Montreal, Can. (40). **C D E**
 Land, Charles H., 36 Adams Ave. W., Detroit, Mich. (46).
 LANDERO, CARLOS F. DE, Ass't Director, Pachuca and Real del Monte Mining Co., Pachuca, Mexico (36). **C B**
 Lane, Horace Manley, M.D., Caixa 14, S. Paulo, Brazil, S. A. (46).
 Lang, Prof. Henry R., Yale University, New Haven, Conn. (41). **H**
 Langmann, Gustav, M.D., 115 W. 57th St., New York, N. Y. (36).
 Law, Benedict W., Pasadena, Cal. (45). **E**
 Lawrence, Harry E., Rochester University, Rochester, N. Y. (44). **B**
 Leavitt, R. G., Easthampton, Mass. (44). **B**

- Lee, Mrs. William, 1382 Beacon St., Boston, Mass. (36).
 Leiter, L. Z., 81 South Clark St., Chicago, Ill. (40).
 Lemp, William J., cor. Cherokee and 2nd Carondelet Avenue, St. Louis, Mo. (27).
 Leslie, Geo. L., Head of Science Dep't, High School, Los Angeles, Cal. (40).
 Lewis, Geo. S., jr., Springfield, Mass. (44). **G**
 Lewis, Joseph Volney, Prof. of Geol. and Mineral., Clemson College, S.C. (45). **E C**
 Lindenkohl, Adolphus, U. S. Coast and Geodetic Survey, Washington, D. C. (40). **E**
 Lindsay, Alexander M., Rochester, N. Y. (41).
 Litch, Robert Lincoln, 115 N. Centre St., Bethlehem, Pa. (46). **B**
 Livermore, Mrs. M. A. C., 1569 Mass. Ave., Cambridge, Mass. (29). **F**
 Loewy, Benno, 206 and 208 Broadway, New York, N. Y. (41).
 Logan, F. G., 2919 Prairie Ave., Chicago, Ill. (42). **H**
 Logan, Walter S., 27 William St., New York, N. Y. (36).
 Lomb, Adolph, P. O. Drawer 1033, Rochester, N. Y. (41).
 Lomb, Henry, P. O. Drawer 1033, Rochester, N. Y. (41).
 Lomb, Henry C., P. O. Drawer 1033, Rochester, N. Y. (43).
 Lord, Benjamin, 34 W. 28th St., New York, N. Y. (36).
 Lord, Prof. H. C., Ohio State University, Columbus, Ohio (44). **A**
 Lovejoy, Frederick W., 348 Hancock St., Brooklyn, N. Y. (43).
 Low, A. A., Columbia Heights, Brooklyn, N. Y. (43). **A**
 Lowell, Aug., 53 State St., Boston, Mass. (29).
 Lowman, John H., M.D., 345 Prospect St., Cleveland, Ohio (37).
 Lufkin, Albert, Newton, Iowa (31). **D E**
 Lull, Richard S., Amherst, Mass. (43). **F H**
 Lund, James, 142 Hawthorne St., Malden, Mass. (45).
 LYMAN, BENJ. SMITH, 708 Locust St., Philadelphia, Pa. (15). **E**
 Lyman, Henry H., 74 McTavish St., Montreal, P. Q., Can. (29). **F E**
- MacArthur, Charles L., Troy, N. Y. (39).
 McCammon, Gen. Joseph K., 1420 F St., Washington, D. C. (40).
 McCartney, Dr. James H., Room 501, Granite Building, Rochester, N. Y. (41). **A B**
 McClintock, A. H., Wilkes Barre, Pa. (33). **H**
 McClintock, Frank (43). **A B D**
 Mac Dougal, Daniel T., Univ. of Minnesota, Minneapolis, Minn. (44). **G**
 McFadden, Prof. L. H., Westerville, Ohio (32). **B C**
 McFarland, Robert W., LL.D., Oxford, Ohio (33). **A**
 McGee, Miss Emma R., Farley, Iowa (33). **H**
 McGiffert, James, 169 8th St., Troy, N. Y. (44). **A**
 MacGregory, A. C., 36 Fremont St., Springfield, Mass. (43).
 McLaughlin, George Eyerma, M.D., 41 Crescent Ave., Jersey City, N. J. (47). **H**
 McMillan, Smith B., Signal, Columbiana Co., Ohio (37).
 McMillin, Emerson, 40 Wall St., New York, N. Y. (37).

- McPherson, Prof. Wm., Ohio State University, Columbus, Ohio (45). **C**
- McWilliams, D. W., 39 S. Portland Ave., Brooklyn, N. Y. (43).
- Macfarlane, Dr. John M., Lansdowne, Del. Co., Pa. (41). **F G**
- Magruder, Wm. T., Ohio State University, Columbus, Ohio (37).
- Malleson, Philip Arthur, M.D., 2014 Fifth Ave., New York, N. Y. (46). **C**
- Mallinckrodt, Edw., P. O. Sub-station A, St. Louis, Mo. (29). **C**
- Mally, Charles William, Wooster, Ohio (46).
- Malone, Rev. Sylvester, 69 S. 3d St., Brooklyn, N. Y. (43).
- Maltby, Margaret E., Ph.D., 32 Eliot St., Jamaica Plain, Mass. (46).
- Mann, Albert, Ph.D., Ohio Wesleyan University, Delaware, Ohio (43). **F G**
- Mann, Thomas Wm., 35 Hampden St., Holyoke, Mass. (44). **D**
- Manning, Charles H., U. S. N., Manchester, N. H. (35). **D**
- Manning, J. Woodward, 1150 Tremont Building, Boston, Mass. (46). **G**
- Manning, Warren H., Brookline, Mass. (31). **F H E**
- Mapes, Charles Victor, 60 W. 40th St., New York, N. Y. (37). **C**
- MARBLE, MANTON, 532 Fifth Ave., New York, N. Y. (36).
- Marble, J. Russel, Worcester, Mass. (31). **C E**
- Marble, Miss Sarah, Woonsocket, R. I. (29). **C**
- Marindin, Henry Louis, U. S. Coast and Geodetic Survey, Washington, D. C. (40). **E**
- Marple, Charles A., 743 Third Ave., Louisville, Ky. (39). **B**
- Marsden, Samuel, 1015 N. Leffenwell Ave., St. Louis, Mo. (27). **A D**
- Mateer, Horace N., M.D., Wooster, Wayne Co., Ohio (36). **F E**
- Mathews, Miss Mary Elizabeth, Lake Erie Seminary, Painesville, Ohio (41). **F**
- Mattoon, Laura I., Springfield, Mass. (44). **F**
- Mayer, Alfred Goldsborough, S.D., M.E., 11 Francis Ave., Cambridge, Mass. (47). **F**
- Maynard, Geo. C., 1227 19th St., Washington, D. C. (35). **B D**
- Maynard, Prof. Samuel T., Agricultural College, Amherst, Mass. (38).
- Maynard, Washburn, Lieut. Com'd U. S. N., Bureau of Ordnance, Navy Dep't, Washington, D. C. (33). **B**
- Means, John H., Cal. State Mining Bureau, 24 Fourth St., San Francisco, Cal. (38). **E**
- Meehan, Mrs. Thos., Germantown, Pa. (29).
- Mellor, Chas. C., 77 Fifth Ave., Pittsburgh, Pa. (38).
- Merrill, Miss Harriet Bell, 661 Jackson St., Milwaukee, Wis. (43). **F**
- Morrow, Miss Harriet L., Kingston, R. I. (44).
- Merryweather, George N., cor. 6th and Race Sts., Cincinnati, Ohio (30). **F H**
- METCALF, ORLANDO, 424 Telephone Building, Pittsburgh, Pa. (35). **D**
- Metzler, Wm. H., Ph.D., Syracuse University, Syracuse, N. Y. (45).
- Miller, Prof. Arthur M., State College, Lexington, Ky. (45). **E**
- Miller, Prof. Dayton C., Case School of Applied Science, Cleveland, Ohio (44). **B**
- MILLER, EDGAR G., 213 E. German St., Baltimore, Md. (29). **E F A**
- Miller, Prof. Frank E., Westerville, Ohio (44). **A**

- Miller, George A., 11 Cook St., Ithaca, N. Y. (46). **A**
 Miller, John A., 2500 Park Ave., Cairo, Ill. (22). **D**
 Miller, P. Schuyler, B.S., Stillwater, Saratoga Co., N. Y. (46). **C**
 Minns, Miss S., 14 Louisburg Square, Boston, Mass. (32).
 Mixer, Fred. K., 427 Delaware Ave., Buffalo, N. Y. (35). **E**
 Mohler, John F., Dickinson College, Carlisle, Pa. (44). **B**
 Moody, Lucius W., New Haven, Conn. (43). **H**
 Moody, Mrs. Mary B., M.D., Fair Haven Heights, New Haven, Conn. (25). **E F**
 Moore, Mrs. A. H., Sawyerville, P. Q., Can. (32). **H**
 Moore, Burton E., Lincoln, Neb. (41). **B**
 Moore, Geo. D., Ph.D., Polytechnic Institute, Worcester, Mass. (40).
 Morehead, J. Turner, Spray, N. C. (44). **C**
 Morgan, Wm. F., Short Hills, N. J. (27).
 Moseley, Edwin L., A.M., High School, Sandusky, Ohio (34).
 Moulton, Prof. Chas. W., Poughkeepsie, N. Y. (44). **C**
 Mowry, Wm. A., 17 Riverside Square, Hyde Park, Mass. (29). **I**
 Moxom, Philip Stafford, D.D., Springfield, Mass. (44). **H I**
 Muckey, Floyd S., care W. Hallock, Columbia University, New York, N. Y. (44). **B**
 Muir, John, Martinez, Cal. (22).
 Mulford, Miss A. Isabel, Missouri Botanical Garden, St. Louis, Mo. (45).
G
 Mulliken, Samuel P., Mass. Institute of Technology, Boston, Mass. (43).
 Munson, Prof. Welton M., Maine State College, Orono, Me. (41).
 Murphy, Edward, M.D., New Harmony, Ind. (39). **C**
 Myer, Mrs. Isaac, 21 E. 60th St., New York, N. Y. (44).
 Myers, Prof. G. W., University of Illinois, Urbana, Ill. (46). **A**
 Myers, Prof. Henry C., University of Washington, Seattle, Wash. (46).
 Myers, William S., M.Sc., F.C.S., Assoc. Prof. of Chemistry, Rutgers College, New Brunswick, N. J. (43). **C**
 Myres, John L., M.A., F.S.A., Christ Church, Oxford, Eng. (46). **H**
 Myrick, Herbert, Springfield, Mass. (44).
 Needham, James G., Cornell University, Ithaca, N. Y. (45). **F**
 Neff, Peter, jr., Consulting Engineer and Superintendent, Room 3, 87 Public Square, Cleveland, Ohio (34) **B**
 Nelson, Julius, Ph.D., Rutgers College, New Brunswick, N. J. (43).
 Nelson, Wm., Rooms 7 and 8, Paterson Nat'l Bank, Paterson, N. J. (42).
 Nelson, Wolfred, C.M., M.D., F.R.G.S., Astor House, New York, N. Y. (35). **H E**
 Nesmith, Henry E., jr., 28 South St., New York, N. Y. (30). **B F C**
 Newson, John F., Ass't Prof. Geology, University of Indiana, Bloomington, Ind. (44). **E**
 Nichols, Austin P., 4 Highland Ave., Haverhill, Mass. (37).
 Nichols, Miss Mary A. (45).
 Niven, William, 853 Broadway, New York, N. Y. (44).
 Norton, Prof. Wm. H., Mt. Vernon, Iowa (39). **E**

Nunn, R. J., M.D., 119 York St., Savannah, Ga. (33). **B H**

Oberholser, Harry Church, Division Biological Survey, Dep't Agriculture, Washington, D. C. (46). **C**

O'Connor, Joseph, 146 Frank St., Rochester, N. Y. (41).

O'Neill, Wm. Lane, Downing Building, New York, N. Y. (43).

Osborne, Amos O., Waterville, Oneida Co., N. Y. (19). **E**

Osgood, Joseph B. F., Salem, Mass. (31).

O'Sullivan, Rev. Denis T., S.J., Woodstock College, Woodstock, Md. (40). **B A**

Owen, Prof. D. A., Franklin, Ind. (34). **E**

Packard, Homer H., Detroit, Mich. (46). **C**

PAGE, DR. DUDLEY L., 46 Merrimack St., Lowell, Mass. (33). **F**

PAGE, MRS. NELLIE K., 46 Merrimack St., Lowell, Mass. (33). **F**

Palmer, Prof. Arthur William, 614 W. Park St., Champaign, Ill. (46) **C**

Palmer, Dr. Edward, care F. V. Coville, Botanical Division, Dep't of Agriculture, Washington, D. C. (22). **H**

Palmer, Hon. Thomas W., Detroit, Mich. (46).

Palmer, Walter Keifer, 1301 New Hampshire St., Lawrence, Kan. (47).

D B

Park, Dr. Roswell, President Buffalo Soc. Nat. Hist., 510 Delaware Ave., Buffalo, N. Y. (45). **H**

Parker, Herschel C., 21 Fort Greene Place, Brooklyn, N. Y. (43).

Parmelee, H. P., Charlevoix, Mich. (42). **H E**

Parsons, C. Chauncy, 43 Sedgwick St., Brooklyn, N. Y. (47). **C B**

PARSONS, JNO. E. (36).

Patten, John, care The E. D. Onion Ice Co., Baltimore, Md. (43).

Patterson, Mrs. Flora Wambaugh, Ass't Pathologist, Department of Agriculture, Washington, D. C. (44). **G**

Patterson, Prof. James L., Chestnut Hill, Philadelphia, Pa. (45).

Payne, Frank Fitz, Meteorological Office, Toronto, Ontario, Can. (38).

Peck, Mrs. Emma J., 44 Billings Park, Newton, Mass. (40).

Peck, Mrs. John H., 3 Irving Place, Troy, N. Y. (28).

Peck, W. A., C.E., 1051 Clarkson St., Denver, Col. (19). **E**

Peckham, Wheeler H., Drexel Building, Wall St., New York, N. Y. (36).

Pedrick, Miss Catherine F., Lawrence, Mass. (43).

Peirce, Cyrus N., D.D.S., 1415 Walnut St., Philadelphia, Pa. (31). **F**

Pell, Alfred, Highland Falls, N. Y. (36).

Pendleton, Edward Waldo, 21 Moffat Block, Detroit, Mich. (46). **I H**

PERKINS, ARTHUR, 14 State St., Hartford, Conn. (31). **B A**

Perrine, Miss Lura L., Valley City, No. Dak. (47). **E H I**

Peters, Prof. Clayton A., Edinboro, Pa. (46). **G**

Pettee, Rev. J. T., Meriden, Conn. (39).

Pettegrew, David Lyman, P. O. Box 75, Worcester, Mass. (44). **A**

Pfister, Joseph Clement, 240 Sixth Ave. (Roseville), Newark, N. J. (43).

Phillips, John S., Editor McClure's Magazine, 141 E. 25 St., New York, N. Y. (46).

- Pickett, Dr. Thos. E., Maysville, Mason Co., Ky. (25). **HF**
 Pickett, William Douglas, Four Bear, Big Horn Co., Wyo. (41). **D**
 PIERREPONT, HENRY E., 216 Columbia Heights, Brooklyn, N. Y. (43).
 Pieters, Adrian J., U. S. Dep't Agriculture, Washington, D. C. (46). **G**
 Pike, J. W., Mahoning, Portage Co., Ohio (29). **ECF**
 Pilling, J. W., 1301 Massachusetts Ave., Washington, D. C. (40).
 Pillsbury, J. E., Lieut. U. S. N., care Dr. W. L. Richardson, 225 Commonwealth Ave., Boston, Mass. (33). **EB**
 Pinney, Mrs. Augusta Robinson, 350 Central St., Springfield, Mass. (44).
FG
 Pitkin, Lucius, 138 Pearl St., New York, N. Y. (29).
 Pitt, Prof. William H., 2 Arlington Place, Buffalo, N. Y. (25).
 Place, Edwin, Terre Haute, Ind. (33). **B**
 Pollard, Charles Louis, 1839 5th St., N. W., Washington, D. C. (44). **G**
 Pomeroy, Charles Taylor, 55 Broad St., Newark, N. J. (43).
 Porteous, John, 48 St. Stephen St., Boston, Mass. (22).
 Porter, Miss Edna, 77 Bryant St., Buffalo, N. Y. (41). **FG**
 Porter, Prof. James Madison, Lafayette College, Easton, Pa. (45). **D**
 Potter, Rev. Henry C., 804 Broadway, New York, N. Y. (29).
 POTTER, O. B., 26 Lafayette Place, New York, N. Y. (36).
 Prang, Louis, 45 Centre St., Roxbury, Mass. (29). **D**
 Proctor, Miss Edna Dean, Framingham, Mass. (44). **H**
 Proctor, Miss Mary, 29 E. 46th St., New York, N. Y. (43). **A**
 PRUYN, JOHN V. L., JR., Albany, N. Y. (29).
 Pulsifer, Mrs. C. L. B., Newton Centre, Mass. (33).
 Purington, Miss Florence, Mount Holyoke College, South Hadley, Mass. (46). **A**
 Putnam, Chas. P., M.D., 63 Marlborough St., Boston, Mass. (28).
 Putnam, Miss Elizabeth D., 2013 Brady St., Davenport, Iowa (45).
 Putnam, Joseph E., 123 State St., Rochester, N. Y. (45). **B**
 Pynchon, William Harry Chichelé, Trinity College, Hartford, Conn. (44). **E**
 'Quick, Robert W., Georgia School of Technology, Atlanta, Ga. (43).
 Quick, Walter S., Clemson College, S. C. (46). **C**
 Ramaley, Francis, University of Colorado, Boulder, Col. (45). **G**
 Rand, C. F., M.D., 1228 15th St. N. W., Washington, D. C. (27). **EH**
 Rane, Frank Wm., New Hampshire College Agricultural Experiment Station, Durham, N. H. (42).
 Ransom, Chauncey Monroe, 73 Federal St., Boston, Mass. (47). **I**
 Reber, Prof. Louis E., State College, Centre Co., Pa. (35). **D**
 Rêche, Miss Eugénie M., 31 Howell St., Rochester, N. Y. (41). **EH**
 Redding, Prof. Allen C., 1000 N. Cory St., Findlay, Ohio (39). **C**
 Redfield, William C., 107 Macon St., Brooklyn, N. Y. (44). **D**
 Reed, Charles J., 3313 N. 16th St., Philadelphia, Pa. (34). **CB**
 Reed, John O., 34 E. Kingsley St., Ann Arbor, Mich. (44).
 Reed, Taylor, Princeton, N. J. (38). **A**
 Reichel, Rev. George V., Ph.D., Lock Box 85, Brockport, N. Y. (41) **FH**
 (46)

- Renninger, John S., M.D., Marshall, Minn. (31). **C F**
 Reuter, Dr. Ludwig, Chief Chemist of Merck & Co., Merck Building,
 University Place, New York, N. Y. (46). **C**
 Reynolds, George, P. O. Box B, Salt Lake City, Utah (44). **H**
 Rice, Edward L., A.B., Allegheny College, Meadville, Pa. (43).
 Rich, Jacob Monroe, 50 W. 38th St., New York, N. Y. (33). **B A**
 Rich, Michael P., 50 W. 38th St., New York, N. Y. (40).
 Ricketts, Col. R. Bruce, Wilkes Barre, Pa. (33). **E**
 Rideout, Bates S., Norway, Me. (31). **E H**
 Ries, Elias E., E.E., 1031 Temple Court, New York, N. Y. (33). **B I D**
 Ries, Heinrich, Ph.B., Columbia University, New York, N. Y. (41). **E**
 Riggs, Chauncey Wales, Smithdale, Cross Co., Ark. (41). **H**
 Riggs, Geo. W., Summit, N. J. (26). **C**
 Ritchie, John, Jr., Box 2725, Boston, Mass. (46). **A F**
 Rittenhouse, Charles T., 253 Broadway, New York, N. Y. (46). **B D**
 RIVERA, JOSÉ DE (29).
 Roberts, Miss Jennie B., Round Hill, Conn. (43).
 ROBERTSON, THOMAS D., Rockford, Ill. (10). **E H**
 Robinson, Prof. Otis Hall, 273 Alexander St., Rochester, N. Y. (23). **B A**
 Rochester, DeLancey, M.D., 469 Franklin St., Buffalo, N. Y. (35). **F**
 Rockwood, Charles G., Drawer A, Newark, N. J. (36).
 Roessler, Franz, 73 Pine St., New York, N. Y. (39).
 Rolfe, Charles W., Urbana, Ill. (32).
 Rolfs, P. H., Florida Agricultural College, Lake City, Fla. (41). **G**
 Rolker, Charles M. (43). **D**
 ROOSEVELT, MRS. MARION T., 57 Fifth Ave., New York, N. Y. (31). **H I**
 Ross, Prof. Bennett Battle, A. & M. College, Auburn, Ala. (45). **C**
 Ross, Denman Waldo, Ph.D., Cambridge, Mass. (29).
 Roth, Filibert, Cornell University, Ithaca, N. Y. (39). **F**
 Rothe, Wm. G., 226 Stuyvesant Ave., Brooklyn, N. Y. (43).
 Rotzell, W. E., M.D., Narberth, Montgomery Co., Pa. (45). **F H**
 Ruland, M. A., 292 Green Ave., Brooklyn, N. Y. (43).
 Rupp, August, A.B., College of City of New York, New York, N. Y. (35).
 Rupp, Philip, M.D., 334 E. 17th St., New York, N. Y. (35).
 Russell, A. H., Captain of Ordnance, U. S. A., care of Chief of Ordnance,
 U. S. A., Washington, D. C. (38). **D**
 Russell, Frank, Ph.D., Instructor in Anthropology, Harvard University,
 Peabody Museum, Cambridge, Mass. (45). **H**
 Russell, John Andrew, A.M., 401 Chamber of Commerce, Detroit, Mich.
 (46).
 Russell, Hon. John Edwards, Leicester, Mass. (47). **I**
 Sackett, Miss Eliza D., Cranford, N. J. (35). **F H**
 Sage, John H., Portland, Conn. (23). **F**
 Sander, Dr. Enno, St. Louis, Mo. (27). **C**
 Sargent, Dudley Allen, M.D., Director of the Hemenway Gymnasium,
 Harvard University, Cambridge, Mass. (47). **H**
 Sargent, Herbert E., Museum of Art, Detroit, Mich. (46). **F**

- Sayre, Robert H., South Bethlehem, Pa. (28). **D**
 Schaeffer, Henri N. F., P. O. Box 676, Manchester, N. H. (46). **C**
 SCHAFFER, CHAS., M.D., 1309 Arch St., Philadelphia, Pa. (29). **FE**
 SCHAFFER, MRS. MARY TOWNSEND SHARPLESS, 1309 Arch St., Philadelphia, Pa. (38). **FE**
 Scharar, Christian H., 2073 N. Main Ave., Scranton, Pa. (33). **ADEH**
 SCHERMERHORN, F. AUG., 61 University Place, New York, N. Y. (36).
 SCHERMERHORN, WM. C., 49 W. 23d St., New York, N. Y. (36).
 Schieren, Hon. Charles A., Brooklyn, N. Y. (43). **IC**
 Schimpf, Prof. Henry W., 365 Franklin Ave., Brooklyn, N. Y. (43).
 Schlotterbeck, Julius O., Ann Arbor, Mich. (46). **G**
 Schmid, Dr. H. Ernest, White Plains, N. Y. (25).
 Schneck, Jacob, M.D., Mount Carmel, Ill. (41). **EFH**
 Schobinger, John J., 2101 Indiana Ave., Chicago, Ill. (34). **B**
 Schöney, Dr. L., 1670 Lexington Ave., New York, N. Y. (29). **F**
 Schuette, J. H., Green Bay, Wis. (34). **FE B**
 Schultz, Carl H. (29).
 Scott, Prof. Arthur William, St. David's College, Lampeter, S. Wales, Eng. (46). **AB**
 Scott, Martin P., M.D., Maryland Agric. College, College Park, Md. (31).
 Scoville, S. S., M.D., Lebanon, Ohio (30). **EF**
 Searing, Anna H., M.D., Escondido, San Diego Co., Cal. (41). **G**
 Sebert, William F., 353 Clinton St., Brooklyn, N. Y. (41). **AE**
 Selby, Augustine Dawson, Ohio Agricultural Experiment Station, Wooster, Ohio (44). **G**
 Serrell, Lemuel W., 140 Nassau St., New York, N. Y. (36). **D**
 Seymour, A. T., Dobbs Ferry, N. Y. (47).
 Sharples, Philip Price, A.B., 22 Concord Ave., Cambridge, Mass. (47). **C**
 SHEAFER, A. W., Pottsville, Pa. (28).
 Sheldon, Mrs. J. M. Arms, 18 W. Cedar St., Boston, Mass. (44). **F**
 Shepardson, Prof. Geo. D., 1107 S. E. 7th St., Minneapolis, Minn. (45).
BD
 Shepherd, Elizabeth, 253 W. 128th St., New York, N. Y. (39).
 Sherman, Orray Taft, 379 Harvard St., Cambridge, Mass. (39).
 Shultz, Charles S., Hoboken, N. J. (31). **F**
 Siemon, Rudolph, 191 Calhoun St., Fort Wayne, Ind. (40). **AF**
 SILVER, L. B., 172 Summit St., Cleveland, Ohio (37).
 Simonds, Hon. Wm. E., Hartford, Conn. (44).
 Sirrine, F. Atwood, Jamaica, Long Island, N. Y. (44).
 Skiff, F. J. V., Director, Field Columbian Museum, Chicago, Ill. (43).
 Skilton, George S., 372 Decatur St., Brooklyn, N. Y. (43).
 Slade, Elisha, Somerset, Bristol Co., Mass. (29). **F**
 Slocum, Chas. E., Ph.D., M.D., Defiance, Ohio (34). **FGH**
 Small, John Kunkel, Columbia University, New York, N. Y. (44).
 Smillie, Thomas W., U. S. National Museum, Washington, D. C. (40). **F**
 Smith, Arma A., West Camden, N. Y. (45).
 Smith, Arthur Whitmore, Middletown, Conn. (44). **B**

- Smith, Benj. G., 45 Fayerweather St., Cambridge, Mass. (29). **I**
 Smith, Miss Cora A., Lansingburg, N. Y. (44). **FG**
 Smith, De Cost, Skaneateles, N. Y. (38). **H**
 Smith, E. Renel, Skaneateles, N. Y. (38).
 Smith, Ernest Ellsworth, 262 Fifth Ave., New York, N. Y. (43).
 Smith, Prof. Harold B., Worcester Polytechnic Institute, Worcester, Mass. (43): **D**
 Smith, Henry L., 149 Broadway, New York, N. Y. (26).
 Smith, Prof. Herbert S. S., Princeton University, Princeton, N. J. (29). **D**
 Smith, Herbert W., 2 Wabash Ave., Chicago, Ill. (45). **E**
 Smith, Miss J. Angelina, State Normal School, Framingham, Mass. (45). **E**
 Smith, James Hervey, Baldwin University, Berea, Ohio (40).
 Smith, Miss Jane, Peabody Museum, Cambridge, Mass. (29). **H**
 Smith, Jos. R., Col. and Ass't Surgeon Gen. U. S. A., 2300 De Laney Place, Philadelphia, Pa. (43).
 Smith, Lee Herbert, M.D., 224 Elmwood Ave., Buffalo, N. Y. (45). **H**
 Smith, Mrs. Marshall E., 4608 Wayne St., Germantown, Philadelphia, Pa. (40). **HI**
 Smith, Prof. Sarah Effie, Mt. Holyoke College, S. Hadley, Mass. (46). **A**
 SMITH, USELMA C., 1515 Green St., Philadelphia, Pa. (33). **F**
 Soper, George A., 63 W. 96th St., New York, N. Y. (46). **C**
 Soule, Wm., Ph.D., Alliance, Ohio (33). **BCE**
 Southwick, E. B., Arsenal Building, Central Park, New York, N. Y. (36).
 Souvielle, Mathieu, M.D., Box 355, Jacksonville, Fla. (36). **BEF**
 Souvielle, Mrs. Mathieu, Box 355, Jacksonville, Fla. (24). **ABF**
 Spalding, Fred. P., 159 E. Seneca St., Ithaca, N. Y. (46). **D**
 Spencer, Arthur Coe, B.S., Sub station No. 2, Cleveland, Ohio (41). **E**
 Spilsbury, E. Gybbon, 13 Burling Slip, New York, N. Y. (33). **ED**
 Spofford, Paul N., P. O. Box 1667, New York, N. Y. (36).
 SPRAGUE, C. H., Malden, Mass. (29).
 Squibb, Charles F., A.B., 150 Columbia Heights, Brooklyn, N. Y. (43).
 Squibb, Edward Hamilton, M.D., 148 Columbia Heights, Brooklyn, N. Y. (41). **F**
 Stam, Colin F., Chestertown, Md. (33). **CF**
 Stearns, John Brainerd, B.S., 44 S. Willard St., Burlington, Vt. (44). **C**
 Stebbins, Miss Fannie A., 480 Union St., Springfield, Mass. (44). **GF**
 Stebbins, George S., M.D., Springfield, Mass. (44). **H**
 Steiger, George, Chemical Laboratory, U. S. Geological Survey, Washington, D. C. (40). **CEB**
 Stein, Dr. S. G., Muscatine, Iowa (43).
 Stevens, Frank Lincoln, North High School, Columbus, Ohio (44). **G**
 Stevens, Geo. T., M.D., 33 W. 33d St., New York, N. Y. (28). **BF**
 Stewart, Fred. Carlton, Jamaica, N. Y. (44). **G**
 Stewart, Oscar M., 23 Hazen St., Ithaca, N. Y. (46). **B**
 Stickney, Gardner P., 427 Bradford St., Milwaukee, Wis. (44). **H**
 Stillman, Prof. John M., Stanford University, Cal. (41).

Stine, Prof. W. M., Director Electrical Department, Armour Institute,
Chicago, Ill. (37). **A C**

St. John, Charles E., Ann Arbor, Mich. (46). **B**

Stockwell, Chester Twitchell, 381 Main St., Springfield, Mass. (44). **H I**

Stoller, Prof. James H., Union College, Schenectady, N. Y. (36). **E F**

Stone, Lincoln R., M.D., Newton, Mass. (31).

Stoneman, Miss Bertha, Cornell University, Ithaca, N. Y. (45).

Stowell, John, 48 Main St., Charlestown, Mass. (21).

Stradling, Prof. George F., 3226 Arlington St., Philadelphia, Pa. (41).

Strong, Edwin A., State Normal School, Ypsilanti, Mich. (46). **B**

Strong, Wendell M., 307 Welch Hall, New Haven, Conn. (44). **A B**

Stubbs, W. C., Audubon Park, New Orleans, La. (40).

Sullivan, J. A., 308 Main St., Malden, Mass. (27). **A**

Sweet, Henry N., 89 State St., Boston, Mass. (40). **H D**

Sylvester, Isaiah W., Passaic, N. J. (44). **C**

TAFT, ELIHU B., Burlington, Vt. (36). **H**

Talbott, Mrs. Laura Osborne, 1444 Huntington Place, Washington, D. C.
(36).

Taylor, C. F., M.D., 1520 Chestnut St., Philadelphia, Pa. (45).

Taylor, Edward Randolph, Cleveland, Ohio (39). **C**

Taylor, Prof. Jas. M., Hamilton, Madison Co., N. Y. (33). **A D**

Taylor, Robert S., Box 2019, Fort Wayne, Ind. (39).

Ternan, James C., P. O. Drawer 1033, Rochester, N. Y. (43).

Thaw, Mrs. Mary Copley, Pittsburgh, Pa. (41). **H**

Thompson, Alton Howard, 721 Kansas Ave., Topeka, Kan. (33). **H**

Thompson, Mrs. Frank, 233 S. 4th St., Philadelphia, Pa. (33).

THOMPSON, FRED'K F., 283 Madison Ave., New York, N. Y. (36).

Thompson, J. L., M.D., Indianapolis, Ind. (39). **F**

Tiffany, Asa S., 1221 Rock Island St., Davenport, Iowa (27). **E H**

Tight, Prof. William George, Granville, Ohio (39). **F**

Tilden, Dr. J. N., Peekskill, N. Y. (43).

Todd, Albert M., Kalamazoo, Mich. (37). **C**

Towle, Wm. Mason, State College, Center Co., Pa. (44). **D**

Townsend, Charles O., College Park, Md. (46).

Townsend, Franklin, 4 Elk St., Albany, N. Y. (4).

Treat, Erastus B., Publisher and Bookseller, 5 Cooper Union, cor. 4th Ave.
and 8th St., New York, N. Y. (29). **F I**

Trowbridge, Rev. Chas. R., 223 Porter St., Easton, Pa. (46). **H I**

Trowbridge, Luther H., East Grand Circus Park, Detroit, Mich. (29).

Trowbridge, Mrs. M. E. D., East Grand Circus Park, Detroit, Mich. (21).

I G

True, Rodney Howard, Wingra Park, Madison, Wis. (46). **G**

Turner, J. Spencer, 109 Duane St., New York, N. Y. (43). **B**

Vail, Prof. Hugh D., Santa Barbara, Cal. (18).

Valentine, Edw. P., Richmond, Va. (33). **H**

Van Antwerp, Rev. Francis J., 26 Harper Ave., Detroit, Mich. (46).

- VAN BEUREN, FREDERICK T., 21 W. 14th St., New York, N. Y. (36).
 Van Brunt, Cornelius, 319 E. 57th St., New York, N. Y. (28).
 Van Slyke, Lucius L., Agric. Exper. Station, Geneva, N. Y. (41).
 Varney, A. L., Major of Ordnance, U. S. A., Indianapolis Arsenal, Indianapolis, Ind. (44). **H**
 VAUX, GEO., JR., 404 Girard Building, Philadelphia, Pa. (33). **E A**
 Vermyné, J. J. B., M.D., 2 Orchard St., New Bedford, Mass. (29). **F**
 Villard, Fanny G., Dobbs Ferry, N. Y. (36).
 Vinal, W. Irving, 1106 East Capitol St., Washington, D. C. (40). **E**
 Voorhees, Chas. H., M.D., 111 Carroll Place, New Brunswick, N. J. (29). **F H**
 Vredenburg, Edw. H., 122 S. Fitzhugh St., Rochester, N. Y. (29).
 Wagner, George, University of Kansas, Lawrence, Kan. (46). **C F G**
 Waldron, Clare B., Agricultural College, Fargo, N. D. (45).
 Wales, Salem H., 25 E. 55th St., New York, N. Y. (36).
 Walker, Byron Edmund, Toronto, Ontario, Can. (38). **E**
 Walker, George C., Room 519, Rookery Building, Chicago, Ill. (17).
 Walker, James, Seth Thomas Clock Co., 49 Maiden Lane, New York, N. Y. (43).
 Ward, Frank A., 16-26 College Ave., Rochester, N. Y. (40).
 Ward, J. Langdon, 120 Broadway, New York, N. Y. (29). **I**
 Ware, Wm. R., Columbia University, New York, N. Y. (36).
 Warner, Charles F., Manual Training School, Cambridge, Mass. (45). **B**
 Warren, Howard C., Ph.D., Princeton, N. J. (46).
 Warren, Mrs. Susan C., 67 Mt. Vernon St., Boston, Mass. (29).
 Warrington, James N., 127 Park Ave., Chicago, Ill. (34). **D A B**
 Washburn, Prof. F. L., State University, Eugene, Oregon (44). **F**
 WATERS, GEO. F., 6 Somerset St., Boston, Mass. (29). **B F H E D**
 Watkins, L. D., Manchester, Mich. (34). **F**
 Watson, Miss C. A., Salem, Mass. (31). **D**
 Watson, Elizabeth S., Weymouth, Mass. (42). **E**
 Watson, Thomas A., Weymouth, Mass. (42). **E**
 Watters, William, M.D., 26 S. Common St., Lynn, Mass. (40). **E G**
 Watts, A. J., M.D., 1123 Bedford Ave., Brooklyn, N. Y. (43).
 Weaver, Gerrit E. Hambleton, A.M., 203 De Kalb Square, West Philadelphia, Pa. (38). **G I**
 Webster, Mrs. N. B., Vineland, N. J. (43).
 Weed, J. N., 71 Water St., Newburgh, N. Y. (37). **E I**
 Weeden, Hon. Joseph E., Randolph, Cattaraugus Co., N. Y. (31).
 Weeks, Fred Boughton, U. S. Geological Survey, Washington, D. C. (44). **E**
 Weems, J. B., Ph.D., Iowa Agricultural College, Ames, Iowa (44). **C**
 Weinzirl, John, 416 S. Arno St., Albuquerque, New Mex. (45). **G**
 Welch, William Henry, M.D., 935 St. Paul St., Baltimore, Md. (47). **F H**
 Wells, Samuel, 31 Pemberton Square, Boston, Mass. (24). **H**
 Wells, William H., jr., Lockport, N. Y. (39). **E**

- Wernicke, Prof. Paul, 107 E. Maxwell St., Lexington, Ky. (44). **A B**
 Werum, Jno. H., Toledo, Ohio (40). **E F**
 Wetzler, Jos., 203 Broadway, New York, N. Y. (36).
 Wheeler, T. B., M.D., 123 Metcalfe St., Montreal, P. Q., Can. (11).
 Wheeler, William, C.E., Concord, Mass. (41).
 Whetstone, John L., Summit Ave., Mt. Auburn, Cincinnati, Ohio (30.) **D**
 White, Charles G., Lake Linden, Mich. (46). **B C**
 White, LeRoy S., Box 924, Waterbury, Conn. (23).
 White, Thaddeus R., 257 W. 45th St., New York, N. Y. (42). **A**
 Whitfield, Thomas, Ph.D., 240 Wabash Ave., Chicago, Ill. (41). **C**
 Whiting, Mrs. Francis, 914 W. Lafayette St., Norristown, Pa. (40).
 Whiting, S. B., 11 Ware St., Cambridge, Mass. (33). **D**
 Whitman, Prof. Charles O., Chicago University, Chicago, Ill. (43). **F**
 Whitney, Willis Rodney, 29 Fairmount, Jamestown, N. Y. (46) **C**
 Wiegand, Karl McKay, Ithaca, N. Y. (45). **G**
 Wilbour, Mrs. Charlotte B., Little Compton, R. I. (28).
 Wilcox, Miss Emily T., Meriden, Conn. (33). **B A**
 Wilder, Geo. Walker, University of Wisconsin, Madison, Wis. (45). **B**
 Willard, Prof. Joseph A., State College, Centre Co., Pa. (44). **A**
 Willetts, Joseph C., Skaneateles, N. Y. (29). **E F H**
 Williams, Henry Smith, M.D., 165 W. 82nd St., New York, N. Y. (34). **F**
 Williamson, Mrs. M. Burton, 1060 W. Jefferson St., Los Angeles, Cal. (44).
F
 WILMARTH, MRS. HENRY D., 51 Eliot St., Jamaica Plain, Mass. (40).
 Wilmot, Thos. J., Commercial Cable Co., Waterville, County Kerry, Ireland (27). **B**
 Wilson, Prof. Andrew G., Lenox College, Hopkinton, Iowa (43). **E**
 Wilson, G. Reed, Townsend Block, Main cor. Swan St., Buffalo, N. Y. (45). **H**
 Wingate, Miss Hannah S., 103 W. 132nd St., New York, N. Y. (31). **E I**
 Witmer, Dr. Lightner, University of Pennsylvania, Philadelphia, Pa. (46). **H**
 Wolcott, Mrs. Henrietta L. T., Dedham, Mass. (29).
 Wood, Mrs. Cynthia A., 171 W. 47th St., New York, N. Y. (43).
 Wood, Rob't Williams, Physical Department, University of Wisconsin, 515 State St., Madison, Wis. (46).
 WOOD, WALTER, 400 Chestnut St., Philadelphia, Pa. (33). **F I**
 Woodhull, John Francis, Teachers' College, Morningside Heights, New York, N. Y. (43).
 Woodrow, Miss Marion W., Winthrop Normal College, Rock Hill, S.C. (45). **E C**
 Woodworth, William McMichael, Ph.D., 149 Brattle St., Cambridge, Mass. (44). **F**
 Worcester, Dean C., Ann Arbor, Mich. (46). **F H**
 Wright, Jonathan, M.D., 73 Remsen St., Brooklyn, N. Y. (43).
 Wright, John S., care Eli Lilly & Co., Indianapolis, Ind. (42). **G**
 Wright, Rufus, 333-339 Lake St., Chicago, Ill. (37). **B**

WUNDERLICH, FREDERICK W., M.D., 165 Remsen St., Brooklyn, N. Y. (45).

Youmans, Mrs. Celia G., Mount Vernon, N. Y. (36).

Youmans, Vincent J., Mount Vernon, N. Y. (43).

[872 PATRONS, CORRESPONDING MEMBERS AND MEMBERS.]

NOTE.—The omission of an address in the foregoing list indicates that letters mailed to that last printed were returned as uncalled for. Information of the present address of the members so indicated is requested by the PERMANENT SECRETARY.

SURVIVING FOUNDERS.

[At the Brooklyn Meeting, 1894, a resolution was unanimously adopted by which all surviving founders of the Association who have maintained an interest in science were made Honorary Life Members of the Association in recognition of their pioneer work in American Science.]

ABBOT, SAMUEL L., Boston, Mass.

BOYÉ, MARTIN H., Coopersburg, Pa.

DIXWELL, EPES S., Cambridge, Mass.

GIBBS, WOLCOTT, Newport, R. I.

HUBBARD, OLIVER PAYSON, New York, N. Y.

WEST, CHARLES E., Brooklyn, N. Y.

HONORARY FELLOWS.¹

- ROGERS, PROF. WILLIAM B., Boston, Mass. (1). 1881. (Born Dec. 17, 1804. Died May 30, 1882.) **B E**
- CHEVREUL, MICHEL EUGÈNE, Paris, France (35). 1886. (Born Aug. 31, 1786. Died April 9, 1889.) **C**
- GENTH, DR. F. A., 3937 Locust St., Philadelphia, Pa. (24). 1888. (Born May 17, 1820. Died Feb. 2, 1892.) **C E**
- HALL, PROF. JAMES, Albany, N. Y. (1). 1890. (Born in 1811. Died Aug. 7, 1898.) **E F**
- GOULD, DR. BENJAMIN APTHORP, Cambridge, Mass. (2). 1895. (Born Sept. 27, 1824. Died Nov. 26, 1896.) **A B**
- LEUCKART, PROF. RUDOLF, Leipsic, Saxony, Germany. (44). 1895. **F**
- GIBBS, PROF. WOLCOTT, Newport, R. I. (1). 1896. **C B**

FELLOWS.²

- Abbe, Professor Cleveland, Meteorologist, Weather Bureau, Department of Agriculture, Washington, D. C. (16). 1874. **BA**
- Abbe, Dr. Robert, 11 W. 50th St., New York, N. Y. (36). 1892.
- ABBOT, DR. SAMUEL L., 90 Mt. Vernon St., Boston, Mass. (1).
- Abert, S. Thayer, Metropolitan Club, cor. 17 and H St., N. W., Washington, D. C. (30). 1891. **ABDEI**
- Adriance, John S., 105 E. 39th St., New York, N. Y. (39). 1895. **C**
- Alden, Prof. Geo. I., Worcester, Mass. (33). 1885. **D**
- Aldrich, Prof. William Sleeper, West Virginia University, Department Mechanical Engineering, Morgantown, W. Va. (43). 1897. **D**
- Alvord, Major Henry E., Lewinsville, Fairfax Co., Va. (29). 1882. **I**
- Alwood, Prof. Wm. B., Agricultural and Mechanical College and Experiment Station, Blacksburg, Va. (39). 1891. **F**
- Andrews, Prof. Launcelot W., Iowa City, Iowa (39). 1891. **C**
- Anthony, Prof. Wm. A., 5 Beekman St., Temple Court, New York, N. Y. (28). 1880. **B**
- Arthur, J. C., Lafayette, Ind. (21). 1883. **G**
- Ashmead, Wm. H., 1833 M St., N. W., Washington, D. C. (40). 1892. **F**
- Atkinson, Edward, 31 Milk St., Boston, Mass. (29). 1881. **ID**
- Atkinson, George F., Cornell University, Ithaca, N. Y. (39). 1892. **G**
- Atwater, Prof. W. O., Wesleyan University, Middletown, Conn. (29). 1882. **C**
- Atwell, Charles B., 1938 Sherman Ave., Evanston, Ill. (36). 1890. **G**
- Auchincloss, Wm. S., Bryn Mawr, Pa. (29). 1886. **DA**
- Austen, Prof. Peter T., 99 Livingston St., Brooklyn, N. Y. (44). 1896. **C**

¹ See ARTICLE VI of the Constitution. ² See ARTICLE IV of the Constitution.

*** The number in parenthesis indicates the meeting at which the member joined the Association; the date following is the year when made a Fellow; the black letters at end of line are those of the sections to which the Fellow belongs.

When the name is given in small capitals, it designates that the Fellow is also a Life Member.

- Avery, Elroy M., Ph.D., LL.D., 657 Woodland Hills Ave., Cleveland, Ohio (37). 1889. **B**
- Ayres, Prof. Brown, Tulane University, New Orleans, La. (31). 1885. **B**
- Babcock, Prof. S. Moulton, Madison, Wis. (33). 1885. **C**
- Bailey, E. H. S., Lawrence, Douglas Co., Kan. (25). 1889. **C E**
- Bailey, Prof. Liberty H., Cornell University, Ithaca, N. Y. (34). 1887. **G**
- Baker, Frank, M.D., 1804 Columbia Road, Washington, D. C. (31). 1886.
- F H**
- Baker, Marcus, U. S. Geological Survey, Washington, D. C. (30). 1882. **A**
- Ballard, Harlan H., 50 South St., Pittsfield, Mass. (31). 1891. **E F**
- BARKER, PROF. G. F., 3909 Locust St., Philadelphia, Pa. (13). 1875. **B C**
- Barnard, Edward E., care Yerkes Observatory, Lake Geneva, Williams Bay P.O., Wis. (26). 1883. **A**
- Barnes, Chas. Reid, Ph.D., Prof. of Plant Physiology, University of Chicago, Chicago, Ill. (33). 1885. **G**
- Barnum, Miss Charlotte C., Ph.D., 26 High St., Springfield, Mass. (36). 1896. **A**
- Barrows, Walter B., Agricultural College, Ingham Co., Mich. (40). 1897. **F**
- Bartlett, Prof. Edwin J., Dartmouth College, Hanover, N. H. (28). 1883. **C**
- Bartlett, John R., Commander U. S. N., Lonsdale, R. I. (30). 1882. **E B**
- Bartley, Elias H., M.D., 21 Lafayette Ave., Brooklyn, N. Y. (33). 1894. **C**
- Barus, Carl, Ph.D., Wilson Hall, Brown University, Providence, R. I. (33). 1887. **B**
- Bascom, Miss Florence, Bryn Mawr College, Bryn Mawr, Pa. (42). 1897. **E**
- Baskerville, Charles, University of North Carolina, Chapel Hill, N. C. (41). 1894. **C**
- Bassett, Homer F., Waterbury, Conn. (23). 1874. **F**
- Battle, Herbert B., Ph.D., Pres., Southern Chemical Co., Winston, N. C. (33). 1889. **C**
- Bauer, Louis A., Ph.D., University of Cincinnati, Cincinnati, Ohio (40). 1892. **A**
- Bausch, Edw., P. O. Drawer 1033, Rochester, N. Y. (26). 1883. **A B C F**
- Beal, Prof. Wm. James, Agricultural College, Ingham Co., Mich. (17). 1880. **G**
- Beardsley, Prof. Arthur, C.E., Ph.D., Swarthmore College, Swarthmore, Del. Co., Pa. (33). 1885. **D**
- Beauchamp, Rev. Wm. M., Baldwinsville, N. Y. (34). 1886. **H**
- Becker, Dr. Geo. F., U. S. Geol. Survey, Washington, D. C. (36). 1890. **E**
- Bedell, Frederick, Ph.D., Cornell University, Ithaca, N. Y. (41). 1894. **BA**
- Bell, Alex. Melville, 1525 35th St., Washington, D. C. (31). 1885. **H**
- Bell, Robert, M.D., Ass't Director Geological Survey, Ottawa, Ontario, Can. (38). 1889. **E F**
- Beman, Wooster W., 19 S. 5th St., Ann Arbor, Mich. (34). 1886. **A**
- BENJAMIN, MARCUS, Smithsonian Institution, Washington, D. C. (27). 1887. **C**

- Benjamin, Rev. Raphael, M.A., Hotel Premier, 72nd St., New York, N. Y. (34). 1887. **E F G H**
- Bessey, Prof. Charles E., University of Nebraska, Lincoln, Neb. (21). 1880. **G**
- Bickmore, Prof. Albert S., American Museum of Natural History, 8th Ave. and 77th St., Central Park, New York, N. Y. (17). 1880. **H**
- Bigelow, Prof. Frank H., U. S. Weather Bureau, Washington, D. C. (36). 1888. **A**
- Bixby, Major W. H., U. S. A., Custom House, Cincinnati, Ohio (34). 1892. **D**
- Blackham, George E., M.D., Dunkirk, N. Y. (25). 1883. **F**
- Blair, Andrew A., 406 Locust St., Philadelphia, Pa. (44). 1896. **C**
- Blake, Clarence J., M.D., 226 Marlborough St., Boston, Mass. (24). 1877. **B F**
- Blake, Francis, Auburndale, Mass. (23). 1874. **B A**
- Blue, Archibald, Director of the Bureau of Mines, Toronto, Ontario, Can. (35). 1890. **I**
- Boas, Dr. Franz, American Museum Natural History, Central Park, New York, N. Y. (36). 1888. **H I**
- Boerner, Chas. G., Vevay, Switzerland Co., Ind. (29). 1886. **A B E**
- Bolley, Henry L., North Dakota Experiment Station, Fargo, North Dakota (39). 1892. **G**
- BOLTON, DR. H. CARRINGTON, Cosmos Club, Washington, D. C. (17). 1875. **C**
- Bond, Geo. M., care of The Pratt & Whitney Co., Hartford, Conn. (33). 1885. **D**
- Booth, Miss Mary A., 32 Byers St., Springfield, Mass. 1894. (34). **FIG**
- Bowditch, Charles P., 28 State St., Boston, Mass. (43). 1897. **H**
- Bowditch, Prof. H. P., Jamaica Plain, Mass. (28). 1880. **F B H**
- Bowser, Prof. E. A., Rutgers College, New Brunswick, N. J. (28). 1881.
- BOYÉ, MARTIN H., M.D., Coopersburg, Lehigh Co., Pa. (1). 1896. **C**
- Boynton, Prof. C. Smith, 69 N. Prospect St., Burlington, Vt. (44). 1896. **C**
- Brackett, Prof. C. F., Princeton University, Princeton, N. J. (19). 1875. **B**
- Brackett, Richard N., Associate Professor of Chemistry, Clemson College, S. C. (37). 1891. **C E**
- Bradford, Royal B., Commander U. S. N., care Navy Department, Washington, D. C. (31). 1891. **B D**
- Branner, Prof. John C., Stanford University, Cal. (34). 1886. **E F**
- Brashear, Jno. A., Allegheny, Pa. (33). 1885. **A B D**
- Brewer, Prof. Wm. H., New Haven, Conn. (20). 1875. **E F I**
- Brinton, D. G., M.D., Media, Pa. (33). 1885. **H**
- Bristol, Wm. H., Stevens Institute, Hoboken, N. J. (36). 1894. **A B D**
- Britton, N. L., Ph.D., Director-in-chief N. Y. Botanical Garden, 41 E. 49th St., New York, N. Y. (29). 1882. **G E**
- Bromwell, Wm., Pratt Institute, Brooklyn, N. Y. (40). 1896.
- Brooks, Wm. R., D.Sc., Director Smith Observatory, Geneva, N. Y. (35) 1886. **A B D G**

Brown, Robert, care of Yale University Observatory, New Haven, Conn. (11). 1874.

Brown, Mrs. Robert, New Haven, Conn. (17). 1874.

Brühl, Gustav, cor. John and Hopkins Sts., Cincinnati, Ohio (28). 1886. **H**

Brush, Charles F., Brush Electric Light Co., Cleveland, Ohio (35). 1886. **B**

BRUSH, PROF. GEORGE J., Yale Univ., New Haven, Conn. (4). 1874. **C E**

Buckhout, W. A., State College, Centre Co., Pa. (20). 1881. **F**

Burgess, Dr. Thomas J. W., Med. Sup't, Protestant Hospital for the Insane, Montreal, P. Q., Can. (38). 1889. **G**

Burr, Prof. William H., School of Mines, 41 E. 49th St., New York, N. Y. (31). 1883.

Butler, A. W., Secretary Board of State Charities, Indianapolis, Ind. (30). 1885. **F H**

Caldwell, Prof. Geo. C., Cornell University, Ithaca, N. Y. (23). 1875. **C**

Calvin, Prof. Samuel, State University of Iowa, Iowa City, Iowa (37). 1889. **E F**

Campbell, Prof. Douglas H., Menlo Park, Cal. (34). 1888. **G**

Campbell, Prof. Edw. D., Ann Arbor, Mich. (44). 1896. **C**

Canby, William M., 1101 Delaware Avenue, Wilmington, Del. (17). 1878. **G**

Carhart, Prof. Henry S., University of Michigan, Ann Arbor, Mich. (29). 1881. **B**

Carleton, M. A., Department Agriculture, Division of Vegetable Pathology, Washington, D. C. (42). 1894. **G**

Carpenter, Louis G., Agricultural College, Fort Collins, Col. (32). 1889. **A B**

Carter, James Madison G., M.D., Waukegan, Ill. (39). 1895. **F**

Carus, Paul, Ph.D., La Salle, Ill. (40). 1895. **H**

Casey, Thomas L., U. S. Engineer Office, Norfolk, Va. (38). 1892. **F**

Catlin, Charles A., 133 Hope St., Providence, R. I. (33). 1895. **C**

CATTELL, PROF. JAMES McKEEN, Columbia University, New York, N. Y. (44). 1896. **B F H I**

Chalmot, G. de, Spray, N. C. (44). 1896. **C**

Chamberlain, Alexander F., Clark University, Worcester, Mass. (38). 1890. **H**

Chamberlin, T. C., 5041 Madison Ave., Chicago, Ill. (21). 1877. **E B F H**

Chandler, Prof. C. F., School of Mines, Columbia University, New York, N. Y. (19). 1875. **C**

Chandler, Prof. Charles Henry, Ripon, Wis. (28). 1883. **A**

Chandler, Seth C., 16 Craigie St., Cambridge, Mass. (29). 1882. **A**

Chanute, O., 413 E. Huron St., Chicago, Ill. (17). 1877. **D I**

Charbonnier, Prof. L. H., University of Georgia, Athens, Ga. (26). 1894. **A B D**

Chase, Frederick L., Yale University Observatory, New Haven, Conn. (43). 1896.

- Cheney, Lellen Sterling, 1081 W. Johnson St., Madison, Wis. (42). 1894. **G**
 Chester, Prof. Albert H., Rutgers College, New Brunswick, N. J. (29).
 1882. **C F**
 Chester, Commander Colby M., U. S. N., care Navy Department, Wash-
 ington, D. C. (28). 1897. **E**
 Chickering, Prof. J. W., Jr., Deaf Mute College, Washington, D. C. (22).
 1877. **G I**
 Christie, James, Pencoyd, Pa. (33). 1894. **D**
 Chute, Horatio N., Ann Arbor, Mich. (34). 1889. **B C A**
 Clark, Prof. John E., 445 Orange St., New Haven, Conn. (17). 1875. **A**
 Clarke, John Mason, Ass't State Geologist and Palæontologist of N. Y.,
 State Hall, Albany, N. Y. (45). 1897. **E**
 Clark, Wm. Bullock, Ph.D., Johns Hopkins University, Baltimore, Md.
 (37). 1891. **E**
 Clarke, Prof. F. W., U. S. Geological Survey, Washington, D. C. (18).
 1874. **C**
 Clarke, Robert, Glendale, Ohio (30). 1895. **H**
 Claypole, Prof. Edward W., 603 Buchtel Ave., Akron, Ohio (30). 1882.
E F
 Cloud, John W., 974 Rookery, Chicago, Ill. (28). 1886. **A B D**
 Cochran, C. B., Food Inspector to State Board of Agriculture, 514 South
 High St., West Chester, Chester Co., Pa. (43). 1896. **C**
 Coffin, Selden J., Prof. of Astronomy, Lafayette College, Easton, Pa. (22).
 1874. **A I**
 Cogswell, W. B., Syracuse, N. Y. (33). 1891. **D**
 COLBURN, RICHARD T., Elizabeth, N. J. (31). 1894. **I F H**
 Cole, Prof. Alfred D., Denison Univ., Granville, Ohio (39). 1891. **B C**
 Collin, Prof. Alonzo, Cornell College, Mount Vernon, Iowa (21). 1891. **B C**
 Collingwood, Francis, Elizabeth, N. J. (36). 1888. **D**
 Colvin, Verplanck, Supt. N. Y. State Adirondack Survey, Albany, N. Y.
 (28). 1880. **E**
 Conant, Prof. L. L., Polytechnic Institute, Worcester, Mass. (39). 1892. **A**
 Cook, Prof. Orator F., U. S. National Museum, Washington, D. C. (40).
 1892. **G**
 Cooley, Prof. Le Roy C., Vassar College, Poughkeepsie, N. Y. (19). 1880.
B C
 Cooley, Prof. Mortimer E., University of Michigan, Ann Arbor, Mich.
 (33). 1885. **D**
 Corthell, Elmer L., 27 Pine St., New York, N. Y. (34). 1886. **D I E**
 Coulter, Prof. John M., University of Chicago, Chicago, Ill. (32). 1884. **G**
 Coville, Frederick V., Department of Agriculture, Washington, D. C.
 (35). 1890. **G**
 Cowles, Alfred H., 656 Prospect St., Cleveland, Ohio (37). 1897. **B C**
 Cragin, Francis W., Colorado College, Colorado Springs, Col. (29). 1890.
F E H
 Crampton, Chas. A., M.D., Office of Internal Revenue, Treasury Depart-
 ment, Washington, D. C. (36). 1887. **C**

- Crandall, Prof. Charles S., Fort Collins, Col. (40). 1894.
 Crawford, Prof. Morris B., Middletown, Conn. (30). 1889. **B**
 Crockett, Charles W., Rensselaer Polytechnic Institute, Troy, N. Y. (39). 1894. **A D**
 Cross, Prof. Charles R., Massachusetts Institute Technology, Back Bay, Boston, Mass. (29). 1880. **B**
 Culin, Stewart, University of Pennsylvania, Philadelphia, Pa. (33). 1890. **H**
 Cushing, Frank H., Bureau of Ethnology, Washington, D. C. (40). 1893. **H**
 Cushing, Henry Platt, Adelbert College, Cleveland, Ohio (33). 1888. **E**
 Dall, William H., Smithsonian Institution, Washington, D. C. (18). 1874. **H F**
 Dana, Edward Salisbury, New Haven, Conn. (23). 1875. **B E**
 Dana, Gen. James J., U. S. A., 1412 21st St., N. W., Washington, D. C. (40). 1896.
 Darton, Nelson H., U. S. Geological Survey, Washington, D. C. (37). 1893.
 Davidson, Prof. Geo., Consulting Engineer, 530 California St., San Francisco, Cal. (29). 1881. **A B D**
 Davis, Bradley Moore, Dep't of Botany, University of Chicago, Chicago, Ill. (45). 1897. **G**
 Davis, C. H., Commander U. S. N., Navy Department, Washington, D. C. (40). 1896.
 Davis, Prof. Wm. Morris, Cambridge, Mass. (33). 1885. **E B**
 Dawson, Geo. M., S.S.C., F.G.S., Geol. Survey, Ottawa, Ontario, Can. (38). 1895. **E**
 Dawson, Sir William, Principal McGill College, Montreal, Can. (10). 1875. **E**
 Day, David F., Buffalo, N. Y. (35). 1887. **G**
 Day, Fisk H., M.D., 309 Sycamore St., Lansing, Mich. (20). 1874. **E H F**
 Dennis, Louis Monroe, Cornell University, Ithaca, N. Y. (43). 1895. **C**
 Denton, Prof. James E., Stevens Institute, Hoboken, N. J. (36). 1888. **D B A**
 Derby, Orville A., San Paulo, Brazil, S. A. (39). 1890.
 Dewey, Frederic P., 702 9th St. N. W., Washington, D. C. (30). 1886. **C E**
 Dexter, Julius, Cincinnati, Ohio (30).
 Dimmock, George, 679 State St., Springfield, Mass. (22). 1874. **F**
 DIXWELL, EPES S., Cambridge, Mass. (1). 1896. **H F**
 Dodge, Charles R., U. S. Dep't Agriculture, Washington, D. C. (22). 1874.
 Dolbear, Prof. A. Emerson, Tufts College, Mass. (20). 1880. **B**
 Doolittle, Prof. C. L., University of Pennsylvania, Philadelphia, Pa. (25). 1885. **A**
 Dorsey, George A., Ph.D., Ass't in Anthropology, Field Columbian Museum, Chicago, Ill. (39). 1892. **H**
 Douglass, Andrew E., American Museum of Natural History, Central Park, New York, N. Y. (31). 1885. **H**
 DRAPER, DAN'L, Ph.D., Director N. Y. Meteorological Observatory, Central Park, 64th St., Fifth Ave., New York, N. Y. (29). 1881. **B D F A**

- Drown, Prof. Thos. M., Lehigh Univ., South Bethlehem, Pa. (29). 1881. **C**
- Du Bois, Prof. Aug. J., New Haven, Conn. (30). 1882. **A B D**
- Du Bois, Patterson, Ass't Editor S.S.T., 1031 Walnut St., Philadelphia, Pa. (33). 1887. **H C I**
- Dudley, Charles B., Drawer 334, Altoona, Pa. (23). 1882. **C B D**
- DUDLEY, WM. L., Prof. of Chemistry, Vanderbilt University, Nashville, Tenn. (28). 1881. **C**
- Dudley, Prof. Wm. R., Stanford University, Cal. (29). 1883. **G**
- Dumble, E. T., 1708 Prairie Ave., Houston, Texas (37). 1891. **E**
- Dunham, Edw. K., 338 E. 26th St., New York, N. Y. (30). 1890.
- Dunnington, Prof. F. P., University Station, Charlottesville, Va. (26). 1880. **C**
- Du Pont, Francis G., Wilmington, Del. (33). 1896. **A B D**
- Durand, Prof. W. F., Ph.D., Cornell University, Ithaca, N.Y. (37). 1890. **B**
- Dwight, Prof. William B., Vassar College, Poughkeepsie, N. Y. (30). 1882. **E F**
- Eastman, Charles Rochester, Museum Comparative Zoölogy, Cambridge, Mass. (41). 1896. **E F**
- Eastman, Prof. J. R., U. S. Naval Observatory, Washington, D. C. (26). 1879. **A**
- Eccles, Robert G., M.D., 191 Dean St., Brooklyn, N. Y. (31). 1894. **F C**
- Eddy, Prof. H. T., Engineering and Mechanics, University of Minnesota, Minneapolis; Minn. (24). 1875. **A B D**
- Edison, Thos. A., Orange, N. J. (27). 1878. **B**
- Egleston, Prof. Thomas, 35 W. Washington Square, New York, N. Y. (27). 1879. **C D E**
- Eichelberger, William Snyder, Ph.D., Nautical Almanac Office, U. S. Naval Observatory, Washington, D. C. (41). 1896. **A**
- Eimbeck, William, U. S. Coast and Geodetic Survey, Washington, D. C. (17). 1874. **A B D**
- Elkin, William L., Yale University Observatory, New Haven, Conn. (33). 1885. **A**
- Ely, Theo. N., Chief of Motive Power, Pennsylvania R. R., Broad St. Station, Philadelphia, Pa. (29). 1886.
- Emerson, Prof. Benjamin K., Box 203, Amherst, Mass. (19). 1877. **E F**
- Emery, Albert H., Stamford, Conn. (29). 1884. **D B**
- Emery, Charles E., Bennett Building, New York, N. Y. (34). 1886. **D B A**
- EMMONS, S. F., U. S. Geological Survey, Washington, D. C. (26). 1879. **E**
- Engelmann, George J., M.D., 336 Beacon St., Boston, Mass. (25). 1875. **F H**
- Ewell, Ervin E., 3644 13th St., N. W., Washington, D. C. (40). 1896. **C**
- Eyerma, John, "Oakhurst," Easton, Pa. (33). 1889. **E C**
- Fairbanks, Henry, Ph.D., St. Johnsbury, Vt. (14). 1874. **B D A**
- Fairchild, Prof. H. L., University of Rochester, Rochester, N. Y. (28). 1883. **E F**
- Fanning, John T., Consulting Engineer, Kasota Block, Minneapolis, Minn. (29). 1885. **D**

- Farlow, Dr. W. G., 24 Quincy St., Cambridge, Mass. (20). 1875. **G**
 Farquhar, Henry, Dep't of Agric., Washington, D. C. (33). 1886. **A I G B**
 Fernow, Bernhard E., Director of School of Forestry, Cornell University, Ithaca, N. Y. (31). 1887. **G I**
 Ferry, Ervin S., University of Wisconsin, Madison, Wis. (41). 1896.
 Firmstone, F., Easton, Pa. (33). 1887. **D**
 Fiske, Thos. S., A.M., Ph.D., Columbia University, New York, N. Y. (38). 1891. **A**
 Flather, Prof. John J., 160 South St., Lafayette, Ind. (44). 1896. **D**
 Fletcher, Miss Alice C., care Peabody Museum, Cambridge, Mass. (29). 1883. **H**
 Fletcher, James, Dominion Entomologist, Experimental Farm, Ottawa, Ontario, Can. (31). 1883. **F**
 Fletcher, Dr. Robert, Army Medical Museum, Washington, D. C. (29). 1881. **F H**
 Flint, Albert S., Washburn Observatory, Madison, Wis. (30). 1887. **A**
 Flint, James M., Surgeon U. S. N., Smithsonian Institution, Washington, D. C. (28). 1882. **F**
 Ford, Prof. D. R., Elmira, N. Y. (41). 1894. **A B**
 Fox, Oscar C., U. S. Patent Office, Washington, D. C. (36). 1891. **B D A**
 Franklin, William S., Lehigh University, So. Bethlehem, Pa. (36). 1892. **B**
 FRAZER, DR. PERSIFOR, Drexel Building, Room 1042, Philadelphia, Pa. (24). 1879. **E C**
 Frazier, Prof. B. W., The Lehigh University, So. Bethlehem, Pa. (24). 1882. **E C**
 Frear, Wm., State College, Centre Co., Pa. (33). 1886. **C**
 Freer, Prof. Paul C., Ann Arbor, Mich. (39). 1891. **C**
 French, Prof. Thomas, jr., Ridgeway Ave., Avondale, Cincinnati, Ohio (30). 1883. **B**
 Frisby, Prof. Edgar, U. S. N. Observatory, Washington, D. C. (28). 1880. **A**
 Frost, Edwin Brant, Hanover, N. H. (38). 1890. **A B**
 Frost, Howard V., Ph.D., Arlington, Mass. (38). 1895. **C**
 Fuller, Prof. Homer T., President Drury College, Springfield, Mo. (35). 1891. **C E**
 Fulton, Robert B., Chancellor University of Mississippi, Prof. of Physics and Astronomy, University, Miss. (21). 1887. **B A**
 Gaffield, Thomas, 54 Allen St., Boston, Mass. (29). 1889. **C B**
 Gage, Prof. Simon Henry, Ithaca, N. Y. (28). 1881. **F**
 Galbraith, Prof. John, Toronto, Ontario, Can. (38). 1889. **D**
 Galloway, B. T., Dep't of Agriculture, Washington, D. C. (37). 1890. **G**
 Gibbs, Prof. J. Willard, New Haven, Conn. (33). 1885. **B**
 Gilbert, G. K., U. S. Geological Survey, Washington, D. C. (18). 1874. **E**
 Gill, Adam Capen, Cornell University, Ithaca, N. Y. (38). 1894. **E**
 Gill, Augustus Herman, Massachusetts Institute Technology, Back Bay, Boston, Mass. (44). 1896. **C**

Gill, Prof. Theo., Columbian University, Washington, D. C. (17). 1874. **F**
 Gillman, Henry, 107 Fort St. West, Detroit, Mich. (24). 1875. **H F G**
 Gilman, Daniel C., President Johns Hopkins University, Baltimore, Md.
 (10). 1875. **E H**

Glenn, William, 1348 Block St., Baltimore, Md. (33). 1893. **C**
 Goessman, Prof. C. A., Massachusetts Agricultural College, Amherst,
 Mass. (18). 1875. **C**

Goff, E. S., 1113 University Ave., Madison, Wis. (35). 1889.

Gold, Theodore S., West Cornwall, Conn. (4). 1887. **B C**

Golden, Miss Katherine E., Lafayette, Ind. (42). 1897. **G**

Goldschmidt, S. A., Ph.D., 43 Sedgwick St., Brooklyn, N. Y. (24). 1880.

C E B

Goldsmith, Edw., 658 N. 10th St., Philadelphia, Pa. (29). 1892. **C B**

Gooch, Frank A., Yale University, New Haven, Conn. (25). 1880. **C**

Goodale, Prof. G. L., Botanic Gardens, Cambridge, Mass. (18). 1875. **G**

Goss, Prof. Wm. F. M., Lafayette, Ind. (39). 1896.

GRANT, MRS. MARY J., 36 Division St., Danbury, Conn. (23). 1874. **A**

Gratacap, L. P., Ph.B., 77th St. and 8th Ave., New York, N. Y. (27). 1884.

C E F

Gray, Prof. Thomas, Terre Haute, Ind. (38). 1889. **D**

Green, Arthur L., Purdue University, Lafayette, Ind. (33). 1888. **C**

Grimes, J. Stanley, 1421 Wesley Ave., Evanston, Ill. (17). 1874. **E H**

Grinnell, George Bird, 346 Broadway, New York, N. Y. (25). 1885. **F E**

Griswold, Leon Stacy, 238 Boston St., Dorchester, Mass. (38). 1893. **E**

Gunckel, Lewis W., 435 W. Second St., Dayton, Ohio (41). 1897. **H**

Guthe, Karl E., Ph.D., Instructor in Physics at the University of Michigan,
 904 S. State St., Ann Arbor, Mich. (45). 1897. **B D**

Hague, Arnold, U. S. Geological Survey, Washington, D. C. (26). 1879. **E**

Haines, Reuben, Haines and Chew St., Germantown, Philadelphia, Pa.
 (27). 1889. **C B**

Hale, Albert C., Ph.D., No. 551 Putnam Ave., Brooklyn, N. Y. (29). 1886.

C B

Hale, Geo. E., Yerkes Observatory, Williams Bay, Wis. (37). 1891. **A B C**

Hale, William H., Ph.D., 40 First Place, Brooklyn, N. Y. (19). 1874.

I F H C B E A

Hall, Arthur G., 1036 Oakland Ave., Ann Arbor, Mich. (41). 1896. **A B**

Hall, Prof. Asaph, 12 Kirkland Place, Cambridge, Mass. (25). 1877. **A**

Hall, Asaph, jr., University of Michigan, Ann Arbor, Mich. (38). 1890. **A**

Hall, Prof. C. W., Dean College Engineering Met. and Mechan. Arts,
 University of Minnesota, Minneapolis, Minn. (28). 1883. **D E**

Hall, Prof. Edwin H., 5 Avon St., Cambridge, Mass. (29). 1881. **B**

Hall, Prof. Lyman B., Haverford College, Haverford, Pa. (31). 1884. **C**

Hallock, Albert P., Ph.D., 440 First Ave., New York, N. Y. (31). 1896. **C**

Hallock, Dr. Wm., Columbia University, New York, N. Y. (40). 1893. **B E**

Hallowell, Miss Susan M., Wellesley College, Wellesley, Mass. (33).
 1890. **G**

- Halsted, Byron D., New Jersey Agricultural Experiment Station, New Brunswick, N. J. (29). 1883. **G**
- Halsted, Prof. George Bruce, Austin, Texas (43). 1896.
- Hambach, Dr. G., 1319 Lami St., St. Louis, Mo. (26). 1891. **F E**
- Hamlin, Dr. A. C., Bangor, Me. (10). 1874. **C E H**
- HANAMAN, C. E., Troy, N. Y. (19). 1883. **F**
- Hardy, Prof. A. S., Dartmouth College, Hanover, N. H. (28). 1883. **A**
- Hargitt, Prof. Charles W., Syracuse University, Syracuse, N. Y. (38). 1891. **F**
- HARKNESS, PROF. WILLIAM, U. S. N. Observatory, Washington, D. C. (26). 1878. **A B C D**
- Harris, Abram Winegardner, Sc.D., President Maine State College, Orono, Me. (40). 1895. **C**
- Harris, Prof. E. P., Amherst College, Amherst, Mass. (44). 1896.
- Harris, Gilbert D., Cornell University, Ithaca, N. Y. (37). 1893. **F E**
- Harris, Uriah R., Lieutenant Com'dr, U. S. N., Navy Yard, Boston, Mass. (34). 1886. **A**
- Harris, W. T., 1303 P St., N. W., Washington, D. C. (27). 1887. **H I**
- Hart, Edw., Ph.D., Lafayette College, Easton, Pa. (33). 1885. **C**
- Haskell, Eugene E., U. S. Engineer Office, Telephone Building, Detroit, Mich. (39). 1896. **A B D**
- HASTINGS, C. S., Sheffield Scientific School of Yale University, New Haven, Conn. (25). 1878. **B**
- Haynes, Prof. Henry W., 239 Beacon St., Boston, Mass. (28). 1884. **H**
- Hedrick, Henry B., A.B., Glencarlyn, Alexandria Co., Va. (40). 1896.
- Hering, Rudolph, Civil and Sanitary Engineer, 100 William St., New York, N. Y. (33). 1885. **DEI**
- Herty, Chas. Holmes, Ph.D., University of Georgia, Athens, Ga. (42). 1895. **C**
- Hervey, Rev. A. B., Bath, Me. (22). 1879. **F**
- Hilgard, Prof. E. W., University of California, Berkeley, Cal. (11). 1874. **C E B**
- Hill, David J., University of Rochester, Rochester, N. Y. (41). 1895. **H I**
- Hill, John Edward, Brown University, Providence, R. I. (44). 1897. **D**
- Hill, Robert Thomas, U. S. Geological Survey, Washington, D. C. (36). 1889. **E**
- Hillyer, Homer W., Ph.D., Chemical Laboratory, University of Wisconsin, Madison, Wis. (42). 1896. **C**
- Himes, Prof. Charles F., Carlisle, Pa. (29). 1882. **B C**
- Hinrichs, Dr. Gustavus, 3132 Lafayette Ave., St. Louis, Mo. (17). 1874. **C B**
- Hitchcock, Albert Spear, Manhattan, Kan. (39). 1892. **G**
- HITCHCOCK, PROF. CHARLES H., Hanover, N. H. (11). 1874. **E**
- Hobbs, William Herbert, Ph.D., Madison, Wis. (41). 1893. **E**
- Hodgkins, Prof. H. L., Columbian University, Washington, D. C. (40). 1896. **A B**
- Hoffmann, Dr. Fred., "Rundschau," P. O. Box 1680, New York, N. Y. (28). 1881. **C F**

- Holland, W. J., D.D., LL.D., Chancellor Western University of Pennsylvania, Pittsburgh, Pa. (37). 1896. **F**
- Hollick, Arthur, Columbia University, New York, N. Y. (31). 1892. **GE**
- Holmes, Prof. Jos. A., Chapel Hill, N. C. (33). 1887. **EF**
- Holmes, Wm. H., National Museum, Washington, D.C. (30). 1883. **H**
- Horsford, Miss Cornelia, 27 Craigie St., Cambridge, Mass. (46). 1897. **H**
- Hosea, Lewis M., Johnston Building, Cincinnati, Ohio (30). 1883. **BH**
- Hotchkiss, Major Jed., Staunton, Va. (31). 1883. **EHI**
- Hough, Prof. G. W., Northwestern University, Evanston, Ill. (15). 1874. **A**
- Hough, Walter, U. S. National Museum, Washington, D. C. (38). 1890.
- Hovey, Edmund O., American Museum Natural History, Central Park, New York, N. Y. (36). 1895. **CE**
- Hovey, Rev. Horace C., 60 High St., Newburyport, Mass. (29). 1883. **EH**
- Howard, Prof. Curtis C., 97 Jefferson Ave., Columbus, Ohio (38). 1892. **C**
- Howard, Leland O., Dep't of Agriculture, Washington, D. C. (37). 1889. **F**
- Howe, Charles S., Prof. of Mathematics, Case School of Applied Science, Cleveland, Ohio (34). 1891. **A**
- Howe, Prof. Jas. Lewis, Washington and Lee University, Lexington, Va. (36). 1888. **C**
- Howell, Edwin E., 612 17th St., N. W., Washington, D. C. (25). 1891. **E**
- Hrdlicka, Alès, M.D., 130 E. 93d St., New York, N. Y. (46). 1897. **H**
- Hubbard, Henry Guernsey, 230 New Jersey Ave., Washington, D. C. (41). 1895. **F**
- HUBBARD, PROF. OLIVER PAYSON, 117 W. 55th St., New York, N. Y. (1). 1896.
- Hulst, Rev. Geo. D., 15 Himrod St., Brooklyn, N. Y. (29). 1887. **F**
- Hunt, Alfred E., 116 Water St., Pittsburgh, Pa. (35). 1891. **CD**
- Hunter, Andrew Frederick, Barrie, Ontario, Can. (38). 1896. **BHI**
- Hyatt, Prof. Alpheus, Natural History Society, Back Bay, Boston, Mass. (18). 1875. **EF**
- Hyde, Prof. E. W., Station D, Cincinnati, Ohio (25). 1881. **A**
- Iddings, Joseph P., University of Chicago, Chicago, Ill. (31). 1884. **E**
- Jack, John G., Jamaica Plain, Mass. (31). 1890. **G**
- Jackson, Prof. Charles L., Harvard Univ., Cambridge, Mass. (44). 1895. **C**
- Jackson, Dr. Robert T., 33 Gloucester St., Boston, Mass. (37). 1890. **F**
- Jacobus, David S., Stevens Institute, Hoboken, N. J. (36). 1889. **DBA**
- Jacoby, Harold, Columbia University, New York, N. Y. (38). 1891. **A**
- Jacoby, Henry S., Associate Prof. of Bridge Engineering and Graphics, Cornell University, Ithaca, N. Y. (36). 1892. **D**
- Jastrow, Dr. Jos., University of Wisconsin, Madison, Wis. (35). 1887. **HF**
- Jayne, Horace F., 1826 Chestnut St., Philadelphia, Pa. (29). 1884. **FH**
- Jeffries, B. Joy, M.D., 15 Chestnut St., Boston, Mass. (29). 1881. **FH**
- Jenkins, Edw. H., Drawer 101, New Haven, Conn. (33). 1885. **C**
- Jenks, Elisha T., Middleborough, Mass. (22). 1874. **D**

- Jesup, Prof. Henry G., Dartmouth College, Hanover, N. H. (36). 1891. **F**
 Jesup, Morris K., 44 Pine St., New York, N. Y. (29). 1891. **I**
 Jewell, Theo. F., Commander U. S. Navy, Room No. 22, P. O. Building, Buffalo, N. Y. (25). 1882. **B**
 Jillson, Dr. B. C., 6045 Bond St., Pittsburgh, Pa. (14). 1881. **E H F**
 Johnson, John B., Washington University, St. Louis, Mo. (33). 1886. **D**
 Johnson, Otis C., 52 Thayer St., Ann Arbor, Mich. (34). 1886. **C**
 Jones, Lewis R., Burlington, Vt. (41). 1894. **G**
 Jones, Prof. Marcus E., Salt Lake City, Utah (40). 1893. **G**
 Jordan, Prof. David S., Palo Alto, Menlo Park P. O., Cal. (31). 1883. **F**
 Julien, A. A., New York Academy of Sciences, New York, N. Y. (24). 1875. **E C**
 Kedzie, Prof. Nellie S., Peoria, Ill. (34). 1890. **I F**
 Kedzie, Prof. Robert C., Agricultural College, Mich. (29). 1881. **C**
 Keep, Wm. J., Detroit, Mich. (37). 1897.
 Kellerman, Prof. William A., Ohio State University, Columbus, Ohio (41). 1893. **G**
 Kemp, James F., School of Mines, Columbia University, New York, N. Y. (36). 1888. **E**
 Kendall, Prof. E. Otis, 3826 Locust St., Philadelphia, Pa. (29). 1882. **A**
 Kendrick, Prof. Arthur, Rose Polytechnic Institute, Terre Haute, Ind. (45). 1897. **B**
 Kent, William, Passaic, N. J. (26). 1881. **D I**
 Kenyon, Frederick C., Dep't of Agric., Washington, D. C. (46). 1897. **F**
 Kershner, Prof. Jefferson E., Lancaster City, Pa. (29). 1883. **A B**
 Kinealy, John H., Washington University, St. Louis, Mo. (36). 1891. **D**
 King, F. H., Experiment Station, Madison, Wis. (32). 1892. **E F**
 Kinnicutt, Dr. Leonard P., Polytechnic Institute, Worcester, Mass. (28). 1883. **C**
 Klotz, Otto Julius, 437 Albert St., Ottawa, Ontario, Can. (38). 1889.
 Knowlton, Frank H., U. S. National Museum, Washington, D. C. (33). 1893. **G E**
 Kober, Geo. Martin, M.D., 1819 Q St. N. W., Washington, D. C. (40). 1896. **H**
 Kunz, G. F., care Messrs. Tiffany & Co., Union Square, New York, N. Y. (29). 1883. **E H C**
 Lacoe, Ralph D., Pittston, Pa. (31). 1893. **E F**
 Ladd, Prof. E. F., Agricultural College, Fargo, No. Dakota (36). 1889. **C**
 Laflamme, Prof. J. C. K., Laval University, Quebec, Can. (29). 1887. **E B**
 LaFlesche, Francis, Indian Bureau, Interior Dep't, Washington, D. C. (33). 1885. **H**
 Lamb, Daniel S., M.D., 800 10th St., N. W., Washington, D. C. (40). 1894. **H**
 Lambert, Preston A., 215 S. Center St., Bethlehem, Pa. (41). 1896. **A**
 Landreth, Olin H., Prof. of Civil Engineering, Union College, Schenectady, N. Y. (28). 1883. **D**

- Langenbeck, Karl, 27 Orchard St., Zanesville, Ohio (39). 1896. **C**
- Langley, Prof. J. W., Case School of Applied Science, Cleveland, Ohio (23). 1875. **CB**
- Langley, Prof. S. P., Secretary Smithsonian Institution, Washington, D. C. (18). 1874. **AB**
- Lanza, Prof. Gaetano, Massachusetts Institute of Technology, Back Bay, Boston, Mass. (29). 1882. **DAB**
- Lattimore, Prof. S. A., University of Rochester, Rochester, N. Y. (15). 1874. **C**
- Laudy, Louis H., Ph.D., School of Mines, Columbia University, New York, N. Y. (28). 1890. **C**
- Lazenby, Prof. Wm. R., Columbus, Ohio (30). 1882. **BI**
- Leach, Miss Mary F., Mt. Holyoke College, South Hadley, Mass. (44). 1896. **C**
- LeBrun, Mrs. Michel, 8 Mountain Ave., Montclair, New Jersey. (35). 1892. **F**
- LeConte, Prof. Joseph, University of California, Berkeley, Cal. (29). 1881. **EF**
- Ledoux, Albert R., Ph.D., 9 Cliff St., New York, N. Y. (26). 1881. **C**
- Leeds, Prof. Albert R., Stevens Institute, Hoboken, N. J. (23). 1874. **CF**
- Lefavour, Prof. Henry, Williams College, Williamstown, Mass. (42). 1894.
- Lehmann, G. W., Ph.D., 412 E. Lombard St., Baltimore, Md. (30). 1885. **CB**
- Lennon, William H., Brockport, N. Y. (31). 1894. **GC**
- Lesley, Prof. J. Peter, P. O. Box 93, Milton, Mass. (2). 1874. **E**
- Leverett, Frank, Denmark, Iowa (37). 1891. **E**
- Libbey, Prof. William, Princeton, N. J. (29). 1887. **EF**
- Lindenthal, Gustav, C.E., 45 Cedar St., New York, N. Y. (37). 1891. **I**
- Lintner, J. A., N. Y. State Entomologist, Room 27, Capitol, Albany, N. Y. (22). 1874. **F**
- Livermore, Wm. R., Maj. of Eng. U. S. A., Care War Department, Washington, D. C. (38). 1895. **CH**
- Lloyd, John Uri, Pharmaceutical Chemist, Court and Plum Sts., Cincinnati, Ohio (38). 1890. **CF**
- Loeb, Morris, Ph.D., 118 West 72d St., New York, N. Y. (36). 1889. **C**
- Long, Prof. John H., 40 Dearborn St., Chicago, Ill. (41). 1895. **C**
- Lord, Prof. Nat. W., State University, Columbus, Ohio (29). 1881. **C**
- LOUBAT, LE DUC DE, 47 rue Dumont d'Urville, Paris, France (46). 1897. **H**
- Loughridge, Dr. R. H., Ass't Prof. Agric. Chemistry and Agric. Geology, University of California, Berkeley, Cal. (21). 1874. **EC**
- Love, Edward G., 80 E. 55th St., New York, N. Y. (24). 1882. **C**
- Low, Seth, President Columbia University, New York, N. Y. (29). 1890.
- Lowell, Percival, 53 State St., Boston, Mass. (36). 1896. **A**
- Ludlow, Lt. Col. William, Corps of Eng. U. S. A., Army Building, New York, N. Y. (33). 1897. **DB**
- Lyford, Edwin F., Springfield, Mass. (33). 1896. **BCH**
- Lyle, David Alexander, Captain Ordnance Dept. U. S. A., Ordnance Office, War Department, Washington, D. C. (28). 1880. **D**

- Lyon, Dr. Henry, 34 Monument Sq., Charlestown, Mass. (18). 1874.
- McCauley, Major C. A. H., Q. M., U. S. A., 1428 Arch St., Philadelphia, Pa. (29). 1881.
- McClintock, Emory, Morristown, N. J. (43). 1895. **A**
- McCreath, Andrew S., 223 Market St., Harrisburg, Pa. (33). 1889. **CE**
- McCurdy, Chas. W., Ph.D., Prof. of Chemistry, University of Idaho, Moscow, Idaho (35). 1895. **FE**
- McDonnell, Prof. Henry B., College Park, Md. (40). 1893. **C**
- McGee, Dr. Anita Newcomb, Bureau of American Ethnology, Washington, D. C. (37). 1892. **H**
- McGee, W J, Bureau of American Ethnology, Washington, D. C. (27). 1882. **HE**
- McGill, John T., Ph.D., Vanderbilt Univ., Nashville, Tenn. (36). 1888. **C**
- McGregory, Prof. J. F., Colgate Univ., Hamilton, N. Y. (35). 1892. **C**
- McMahon, James, Ithaca, N. Y. (36). 1891. **A**
- MacMillan, Prof. Conway, University of Minnesota, Minneapolis, Minn. (42). 1894. **G**
- McMurtrie, William, 100 William St., New York, N. Y. (22). 1874. **C**
- McNeill, Malcolm, Lake Forest, Ill. (32). 1885. **A**
- McRae, Austin Lee, Consulting Electrical Eng., 306 Oriel Building, St. Louis, Mo. (39). 1891. **B**
- Mabery, Prof. C. F., Case School of Applied Science, Cleveland, Ohio (29). 1881. **C**
- Macbride, Prof. Thomas H., Iowa City, Iowa (38). 1890. **G**
- Macfarlane, Prof. A., Lehigh University, S. Bethlehem, Pa. (34). 1886. **BA**
- Macloskie, Prof. George, Princeton University, Princeton, N. J. (25). 1882. **FG**
- Magie, Prof. Wm. F., Princeton University, Princeton, N. J. (35). 1887.
- MANN, B. PICKMAN, 1918 Sunderland Place, Washington, D. C. (22). 1874. **IF**
- Marcy, Oliver, LL.D., Evanston, Ill. (10). 1874. **E**
- Marlatt, Charles L., 1st Ass't Entomologist, Department of Agriculture, Washington, D. C. (40). 1895. **F**
- Marsh, Prof. C. Dwight, Ripon, Wis. (34). 1893. **FE**
- MARSH, PROF. O. C., Yale University, New Haven, Conn. (15). 1874. **FH**
- Martin, Artemas, U. S. Coast Survey, Washington, D. C. (38). 1890. **A**
- Martin, Prof. Daniel S., 126 Macon St., Brooklyn, N. Y. (23). 1879. **EF**
- Martin, Prof. Wm. J., Davidson College, N. C. (31). 1884. **CE**
- Marvin, C. F., U. S. Weather Bureau, Washington, D. C. (39). 1892. **B**
- Marvin, Frank O., University of Kansas, Lawrence, Kan. (35). 1894. **D**
- Mason, Prof. Otis T., National Museum, Washington, D. C. (25). 1877. **H**
- Mason, Dr. William P., Prof. Rensselaer Polytechnic Institute, Troy, N. Y. (31). 1886. **C**
- Matthews, Dr. Washington, 21 South Ingalls St., Ann Arbor, Mich. (37). 1888. **H**
- Meehan, Thomas, Germantown, Pa. (17). 1875. **G**

- Mees, Prof. Carl Leo, Rose Polytechnic Institute, Terre Haute, Ind. (24). 1876. **B C**
- Mell, Prof. P. H., Polytechnic Institute, Auburn, Ala. (39). 1895. **E G**
- Mendenhall, Prof. T. C., President Worcester Polytechnic Institute, Worcester, Mass. (20). 1874. **B**
- Mercer, H. C., Doylestown, Bucks Co., Pa. (41). 1893. **H**
- Merrill, Frederick J. H., Ph.D., Ass't Director New York State Museum, Albany, N. Y. (35). 1887. **E**
- Merriman, C. C., 1910 Surf St., Lake View, Chicago, Ill. (29). 1880. **F**
- Merriman, Prof. Mansfield, S. Bethlehem, Pa. (32). 1885. **A D**
- Merritt, Ernest, Ithaca, N. Y. (33). 1890. **B**
- Metcalf, William, Pittsburgh, Pa. (33). 1894. **D**
- Michael, Mrs. Helen Abbott, 44 Mount Vernon St., Boston, Mass. (33). 1885. **C F**
- Michelson, Prof. A. A., Chicago University, Chicago, Ill. (26). 1879. **B**
- Miller, Prof. William S., University of Wisconsin, Madison, Wis. (42). 1894. **F**
- Mills, James, M.A., Guelph, Ontario, Can. (31). 1895. **I C**
- Mills, Prof. Wesley, McGill College, Montreal, P. Q., Can. (31). 1886. **F H**
- Minot, Dr. Charles Sedgwick, Harvard Medical School, Back Bay, Boston, Mass. (28). 1880. **F**
- Minot, Francis, M.D., Readville, Mass. (29). 1884.
- Mohr, Dr. Charles, Mobile, Ala. (40). 1895. **G**
- Moler, Geo. S., 106 University Ave., Ithaca, N. Y. (38). 1892.
- Moody, Robert O., M.D., Fair Haven Heights, New Haven, Conn. (35). 1892. **F**
- Moore, Clarence B., 1321 Locust St., Philadelphia, Pa. (44). 1897. **H**
- Moore, E. Hastings, University of Chicago, Chicago, Ill. (39). 1891. **A**
- Moore, Prof. J. W., M.D., Lafayette College, Easton, Pa. (22). 1874. **B D A**
- Moore, Prof. Willis L., Chief of Weather Bureau, Dep't Agriculture, Washington, D. C. (44). 1897. **B**
- Moorehead, Warren K., Ohio State Univ., Columbus, Ohio (38). 1890. **H**
- Moreland, Prof. S. T., Lexington, Va. (33). 1894. **B D**
- Morley, Prof. Edward W., 23 Cutler St., Cleveland, Ohio (18). 1876. **C B E**
- Morse, Prof. E. S., Salem, Mass. (18). 1874. **F H**
- Morton, H., Stevens Institute Technology, Hoboken, N. J. (18). 1875. **B C**
- Moser, Lieut. Comd'r Jeff. F., U. S. N., Com'dg U. S. F. S. Str. Albatross, Navy Pay Office, San Francisco, Cal. (28). 1889. **E**
- Munroe, Prof. C. E., Columbian Univ., Washington, D. C. (22). 1874. **C**
- Murdoch, John, Public Library, Boston, Mass. (29). 1886. **F H**
- Myers, John A., Agric. Exper. Station, Morgantown, W. Va. (30). 1889. **C**
- Nagle, Prof. James C., A. and M. College. College Station, Texas (40). 1893. **D B**
- Nardroff, Ernest R. von. 360a Tompkins Ave., Brooklyn, N. Y. (44). 1896. **B**
- Nef, J. U., University of Chicago, Chicago, Ill. (39). 1891. **C**

- Nelson, Prof. A. B., Centre College, Danville, Ky. (30). 1882. **A B D**
- Newcomb, Prof. S., Navy Dep't, Washington, D. C. (13). 1874. **A B**
- Newcombe, Frederick Chas., 51 E. Liberty St., Ann Arbor, Mich. (43). 1896. **G**
- Newell, F. H., U. S. Geological Survey, Washington, D. C. (40). 1893.
- Newell, William Wells, Editor Journal American Folk Lore, Cambridge, Mass. (41). 1893. **H**
- Nichols, Ernest Fox, Hamilton, N. Y. (41). 1893. **B**
- Nichols, E. L., Ph.D., Cornell University, Ithaca, N. Y. (28). 1881. **B C**
- Niles, Prof. W. H., Cambridge, Mass. (16). 1874. **E**
- Nipher, Prof. F. E., Washington University, St. Louis, Mo. (24). 1876. **B**
- Nolan, Edw. J., M.D., Academy of Natural Sciences, Philadelphia, Pa. (29). 1890. **F**
- NORTON, PROF. THOMAS H., University of Cincinnati, Cincinnati, Ohio (35). 1887. **C**
- Novy, Dr. Frederick G., University of Michigan, Ann Arbor, Mich. (36). 1889. **C**
- Noyes, Prof. Arthur A., Massachusetts Institute Technology, Back Bay, Boston, Mass. (45). 1897. **C**
- Noyes, Miss Mary C., Ph.D., Lake Erie College, Painesville, Ohio (43). 1896. **B**
- Noyes, Prof. Wm. A., Rose Polytechnic Institute, Terre Haute, Ind. (32). 1885. **C**
- Nuttall, Mrs. Zelia, care Peabody Museum, Cambridge, Mass. (35). 1887. **H**
- Nutting, Prof. Charles C., State University of Iowa, Iowa City, Iowa (40). 1892. **F**
- Ogden, Herbert G., U. S. C. and G. Survey, Washington, D. C. (38). 1891. **E**
- Ordway, Prof. John M., Tulane University, New Orleans, La. (9). 1875. **C**
- Orleman, Miss Daisy M., M.D., Peekskill Military Acad., Peekskill, N. Y. (40). 1897. **F**
- Orr, William, jr. 30 Firglade Ave., Springfield, Mass. (39). 1895. **F B**
- Orton, Prof. Edward, President Ohio Agricultural and Mechanical College, Columbus, Ohio (19). 1875. **E**
- Osborn, Henry F., Columbia University, New York, N. Y. (29). 1883. **F**
- Osborn, Herbert, Ames, Iowa (32). 1884. **F**
- Osmond, Prof. I. Thornton, State College, Centre Co., Pa. (33). 1889. **B A C**
- Packard, Dr. A. S., 115 Angell St., Providence, R. I. (16). 1875. **F E**
- Paine, Cyrus F., 806 Granite Building, Rochester, N. Y. (12). 1874. **B A**
- Palache, Charles, University Museum, Cambridge, Mass. (44). 1896. **E**
- Palfray, Hon. Charles W., Salem, Mass. (21). 1874.
- Pammel, Prof. L. H., Iowa Agricultural College, Ames, Iowa (39). 1892. **G**
- Parke, John G., General U. S. A., 16 Lafayette Square, Washington, D. C. (29). 1881. **D**

- PARKHURST, HENRY M., 173 Gates Ave., Brooklyn, N. Y. (23). 1874. **A**
 Parks, C. Wellman, Civil Eng., U. S. N., care Bureau of Navigation,
 Washington, D. C. (42). 1897.
 Parsons, Prof. C. Lathrop, Durham, N. H. (41). 1896.
 Patrick, Geo. E., Ames, Iowa (36). 1890. **C**
 Patterson, Geo. W., jr., Ann Arbor, Mich. (44). 1896.
 Patterson, Harry J., College Park, Prince George's Co., Md. (36). 1890. **C**
 Paul, Prof. Henry M., U. S. Naval Observatory, Washington, D. C. (33).
 1885. **A B**
 Peet, Rev. Stephen D., 5327 Madison Ave., Chicago, Ill. (24). 1881. **H**
 Peirce, George James, Stanford University, Cal. (44). 1897. **G**
 Penrose, Dr. R. A. F., 1331 Spruce St., Philadelphia, Pa. (38). 1890. **E**
 Perkins, Prof. George H., Burlington, Vt. (17). 1882. **H F E**
 Perry, Arthur C., 226 Halsey St., Brooklyn, N. Y. (43). 1896. **A B**
 Peter, Alfred M., 236 E. Maxwell St., Lexington, Ky. (29). 1890. **C**
 Peters, Edw. T., P. O. Box 265, Washington, D. C. (33). 1889. **I**
 Pettee, Prof. Wm. H., 554 Thompson St., Ann Arbor, Mich. (24). 1875. **E**
 Phillips, Prof. A. W., New Haven, Conn. (24). 1879.
 Phillips, Prof. Francis C., Western University, Allegheny, Pa. (36).
 1889. **C**
 Phillips, Dr. Wm. A., Evanston, Ill. (41). 1895. **H**
 Pickering, Prof. E. C., Director of Harvard Observatory, Cambridge,
 Mass. (18). 1875. **A B**
 Pierce, Perry Benjamin, U. S. Patent Office, Washington, D. C. (40).
 1895. **H**
 Pillsbury, Prof. John H., Stoneham, Mass. (23). 1885. **F H**
 Platt, Franklin, Ass't Geologist, 2nd Geological Survey of Pennsylvania,
 1617 Chestnut St., Philadelphia, Pa. (27). 1882. **E**
 Pohlman, Dr. Julius, Buffalo, N. Y. (32). 1884. **E F**
 Powell, Major J. W., Washington, D. C. (23). 1875. **E H**
 Power, Frederick B., Ph.D., care Messrs. Burroughs, Wellcome & Co., 42
 Snow Hill, London, E. C., England (31). 1887. **C**
 Prentiss, D. Webster, M.D., 1101 14th St., N. W., Washington, D. C. (29).
 1882. **F**
 Prentiss, Robert W., Prof. of Mathematics and Astronomy, Rutgers Col-
 lege, New Brunswick, N. J. (40). 1891. **A**
 Prescott, Prof. Albert B., Ann Arbor, Mich. (23). 1875. **C**
 Pritchett, Henry S., Sup't U. S. C. and G. Survey, Washington, D. C.
 (29). 1881. **A**
 Prosser, Charles S., Prof. of Geology, Union College, Schenectady, N. Y.
 (33). 1891. **E F**
 Pulsifer, Wm. H., Newton Centre, Mass. (26). 1879. **A H**
 Pupin, Dr. M. I., Columbia University, New York, N. Y. (44). 1896. **B**
 Putnam, Prof. F. W., Curator Peabody Museum American Archæology and
 Ethnology, Cambridge, Mass.; Curator Dept. Anthropology, Amer.
 Museum Nat. History, Central Park, New York, N. Y. (10). 1874. **H**
 Pynchon, Rev. T. R., Trinity College, Hartford, Conn. (23). 1875.

- Rathbun, Richard, Smithsonian Institution, Washington, D. C. (40). 1892. **F**
- Raymond, Rossiter W., 13 Burling Slip, New York, N. Y. (15). 1875. **E I**
- Raymond, Prof. Wm. G., Rensselaer Polytechnic Institute, Troy,¹₂ N. Y. (44). 1896. **D**
- Rees, Prof. John K., Columbia Univ., New York, N. Y. (26). 1878. **A E B**
- Reese, Charles L., 1801 Linden Ave., Baltimore, Md. (39). 1892. **C**
- Reese, Jacob, 400 Chestnut St., Philadelphia, Pa. (33). 1891. **D B**
- Reid, Harry Fielding, Johns Hopkins Univ., Baltimore, Md. (36). 1893. **B**
- Rensen, Prof. Ira, Johns Hopkins Univ., Baltimore, Md. (22). 1875. **C**
- Rice, Prof. Wm. North, Wesleyan University, Middletown, Conn. (18). 1874. **E F**
- Richards, Prof. Charles B., 137 Edwards St., New Haven, Conn. (33). 1885. **D**
- Richards, Edgar, 341 W. 88th St., New York, N. Y. (31). 1886. **C**
- Richards, Prof. Robert H., Massachusetts Institute Technology, Back Bay, Boston, Mass. (22). 1875. **D**
- Richards, Mrs. Robert H., Massachusetts Institute of Technology, Back Bay, Boston, Mass. (23). 1878. **C**
- Richardson, Clifford, Sup't of Tests, Barber Asphalt Paving Co., Long Island City, N. Y. (30). 1884. **C**
- Ricketts, Prof. Palmer C., 17 1st St., Troy, N. Y. (33). 1887. **D A**
- Ricketts, Prof. Pierre de Peyster, 104 John St., New York, N. Y. (26). 1880. **C D E**
- Ripley, William Z., Ph.D., Newton Centre, Mass. (44). 1897. **H I**
- Robinson, Benjamin Lincoln, Curator Harvard Herbarium, Cambridge, Mass. (41). 1893. **G**
- Robinson, Prof. Franklin C., Bowdoin College, Brunswick, Me. (29). 1889. **C D**
- Robinson, Prof. S. W., 1353 Highland St., Columbus, Ohio (30). 1883. **D B A**
- Rockwell, Gen. Alfred P., Manchester, Mass. (10). 1882. **E**
- Rockwell, Chas. H., Box 293, Tarrytown, N. Y. (28). 1883. **A D**
- Rockwood, Prof. Charles G., jr., Princeton College, Princeton, N. J. (20). 1874. **A E B D**
- Rominger, Dr. Carl, Ann Arbor, Mich. (21). 1879. **E**
- Rood, Prof. O. N., Columbia University, New York, N. Y. (14). 1875. **B**
- Rosa, Edward Bennett, Prof. of Physics, Wesleyan University, Middletown, Conn. (39). 1892. **A B**
- Ross, Waldo O., 1 Chestnut St., Boston, Mass. (29). 1882.
- Rotch, A. Lawrence, Director of Blue Hill Meteorological Observatory, Hyde Park, Mass. (39). 1896. **B**
- Rowland, Prof. Henry A., Baltimore, Md. (29). 1880. **B**
- Rowlee, W. W., Cornell University, Ithaca, N. Y. (41). 1894. **G**
- Runkle, Prof. J. D., Massachusetts Institute of Technology, Boston, Mass. (2). 1875. **A D**

- Rusby, Henry H., M.D., College of Pharmacy, 211 E. 23d St., New York, N. Y. (36). 1890. **G**
- Russell, Prof. H. L., University of Wisconsin, Madison, Wis. (41). 1894. **G**
- Russell, I. C., University of Mich., Ann Arbor, Mich. (25). 1882. **E**
- Ryan, Harris J., Cornell University, Ithaca, N. Y. (38). 1890. **B**
- Sadtler, Sam'l P., 1042 Drexel Building, Philadelphia, Pa. (22). 1875. **C**
- Safford, Dr. James M., Nashville, Tenn. (6). 1875. **E C F**
- Safford, Prof. Truman H., Williamstown, Mass. (41). 1892. **A**
- Salisbury, Prof. R. D., Chicago University, Chicago, Ill. (37). 1890. **B E**
- Salmon, Daniel E., Department of Agriculture, Washington, D. C. (31). 1885. **F**
- Saunders, Prof. Charles E., 32 St. Mary St., Toronto, Ontario, Can. (41). 1895. **C**
- Saunders, William, LL.D., F.R.S.C., F.L.S., Director Canadian Experimental Farms, Ottawa, Can. (17). 1874. **F**
- Saville, Marshall H., American Museum Natural History, Central Park, New York, N. Y. (39). 1892. **H**
- SCHAEBERLE, J. M., Astronomer in the Lick Observatory, San José, Cal. (34). 1886. **A**
- Schanck, Prof. J. Stillwell, Princeton, New Jersey (4). 1882. **C B H**
- Schott, Charles A., U. S. Coast and Geodetic Survey Office, Washington, D. C. (8). 1874. **A**
- Schwarz, E. A., 230 New Jersey Ave., Washington, D. C. (29). 1895. **F**
- Schweinitz, Dr. E. A. de, Department of Agriculture, Washington, D. C. (36). 1889. **C**
- Schweitzer, Prof. Paul, State University of Missouri, Columbia, Mo. (24). 1877. **C B**
- SCUDDER, SAMUEL H., Cambridge, Mass. (13). 1874. **F**
- Scull, Miss S. A., Smethport, McKean Co., Pa. (40). 1895. **H**
- Seaman, W. H., Chemist, 1424 11th St. N. W., Washington, D. C. (23). 1874. **C F**
- Searle, Prof. Geo. M., Catholic University, Washington, D. C. (39). 1891. **A**
- See, Horace, 1 Broadway, New York, N. Y. (34). 1886. **D**
- Seymour, Arthur Bliss, Cambridge, Mass. (36). 1890. **G**
- Seymour, Paul Henry, 479 Second Ave., Detroit, Mich. (44). 1896. **C**
- Sharp, Dr. Clayton H., Ithaca, N. Y. (45). 1897.
- Sharples, Stephen P., 13 Broad St., Boston, Mass. (29). 1884. **C**
- Shaw, Prof. James Byrnie, 1030 Grove St., Jacksonville, Ill. (43). 1896. **A**
- Sheldon, Samuel, A.M., Ph.D., Polytechnic Institute, Brooklyn. N. Y. (42). 1894. **B**
- Shelton, Prof. Edward M., Department of Agriculture, Brisbane, Queensland, Australia (32). 1892. **F**
- Shimer, Porter W., E.M., Easton, Pa. (38). 1889. **C**
- Shufeldt, Dr. R. W., 2508 University Place, N. W., Washington, D.C., (40). 1892. **F**
- (72)

- Sias, Solomon, M.D., Schoharie, Schoharie Co., N. Y. (10). 1874.
- Sigsbee, Chas. D., Com'd'r U. S. N., U. S. Hydrographic Office, Washington, D. C. (28). 1882. **D E**
- Simon, Dr. Wm., 1348 Block St., Baltimore, Md. (29). 1895. **C**
- Simonds, Prof. Frederic W., University of Texas, Austin, Texas (25). 1888. **E F**
- Skilton, James A., 115 Broadway, New York, N. Y. (43). 1895. **I**
- Skinner, Aaron N., U. S. Naval Observatory, Washington, D. C. (40). 1893. **A**
- Smith, Alex., Ph.D., University of Chicago, Chicago, Ill. (40). 1892. **C**
- Smith, Prof. Chas. J., 35 Adelbert St., Cleveland, Ohio (32). 1885. **A B**
- Smith, Prof. Edgar F., University of Pennsylvania, Philadelphia, Pa. (33). 1891. **C**
- Smith, Edwin, Rockville, Montgomery Co., Md. (30). 1882. **A B**
- Smith, Prof. Erastus G., Beloit College, Beloit, Wis. (34). 1887. **C**
- Smith, Erwin F., Department of Agriculture, Washington, D. C. (34). 1890. **G**
- Smith, Prof. Eugene A., University, Ala. (20). 1877. **E C**
- Smith, Harlan I., American Museum Natural History, Central Park, New York, N. Y. (41). 1896. **H**
- Smith, James Perrin, Ph.D., Ass't Prof. of Paleontology, Leland Stanford Junior University, Palo Alto, Cal. (37). 1894. **C E**
- Smith, John B., Professor of Entomology, Rutgers College, New Brunswick, N. J. (32). 1884. **F**
- SMITH, QUINTIUS C., M.D., 617 Colorado St., Austin, Texas (26). 1881. **F**
- Smock, Prof. John Conover, Trenton, N. J. (23). 1879. **E**
- Smyth, C. H., jr., Clinton, N. Y. (38). 1894. **E**
- Snow, Prof. F. H., Lawrence, Kan. (29). 1881. **F E**
- Snyder, Prof. Harry, Saint Anthony Park, Minn. (44). 1897. **C**
- Snyder, Prof. Monroe B., High School Observatory, Philadelphia, Pa. (24). 1882. **A B**
- Soule, R. H., Baldwin Locomotive Works, 1217 Monadnock Building, Chicago, Ill. (33). 1886. **D**
- Spencer, Prof. J. William, 1710 Q St., Washington, D. C. (28). 1882. **E**
- SPENZER, JOHN G., M.D., 370 Central Avenue, Cleveland, Ohio (37). 1895. **C**
- Spinney, L. B., Iowa State College, Ames, Iowa (42). 1897. **B**
- Springer, Dr. Alfred, Box 621, Cincinnati, Ohio (24). 1880. **C**
- Squibb, Edward R., M.D., 152 Columbia Heights, Brooklyn, N. Y. (43). 1896.
- Starr, Frederick, Ph.D., Prof. University of Chicago, Chicago, Ill. (36). 1892. **H E**
- Stearns, Robert E. C., 1025 East Eighteenth St., Los Angeles, Cal. (18). 1874. **F**
- Stedman, John M., Prof. of Entomology, State University of Missouri, Columbia, Mo. (40). 1892. **F**

- Steinmetz, Chas. Proteus, General Electric Co., Schenectady, N. Y. (40). 1895. **B**
- Stejneger, Leonhard, Curator Dept. of Reptiles, National Museum, Washington, D. C. (40). 1892. **F**
- STEPHENS, W. HUDSON, Lowville, N. Y. (18). 1874. **E H**
- Sternberg, George M., M.D., LL.D., Surgeon General U. S. A., War Department, Washington, D. C. (24). 1880. **F**
- Stevens, Prof. W. LeConte, Rensselaer Polytechnic Institute, Troy, N. Y. (29). 1882. **B**
- Stevenson, Mrs. Cornelius, 237 S. 21st St., Philadelphia, Pa. (33). 1895. **H**
- Stevenson, Prof. John J., Univ. Heights, New York, N. Y. (36). 1888. **E**
- Stevenson, Mrs. Matilda C., Bureau of Ethnology, Washington, D. C. (41). 1893. **H**
- Stieglitz, Dr. Julius, University of Chicago, Chicago, Ill. (39). 1895. **C**
- Stokes, Henry Newlin, Ph.D., U. S. Geological Survey, Washington, D. C. (38). 1891. **C E**
- Stone, Ormond, Director Leander McCormick Observatory, University of Virginia, Va. (24). 1876. **A**
- Story, Prof. Wm. E., Clark University, Worcester, Mass. (29). 1881. **A**
- Stowell, Prof. T. B., Potsdam, N. Y. (28). 1885. **F**
- Stuart, Prof. A. P. S., Lincoln, Nebraska (21). 1874. **C**
- Sturgis, Wm. C., 384 Whitney Ave., New Haven, Conn. (40). 1892. **G**
- Sturtevant, E. Lewis, M.D., S. Framingham, Mass. (29). 1882. **G**
- Swingle, Walter T., Department of Agriculture, Washington, D. C. (40). 1892. **G**
- Tainter, Charles Sumner, Central Power Station, Washington, D. C. (29). 1881. **B D A**
- Talbot, Henry P., Prof. Analytical Chemistry, Massachusetts Institute of Technology, Back Bay, Boston, Mass. (44). 1896. **C**
- Taylor, Frank B., 391 Fairfield Ave., Fort Wayne, Ind. (39). 1897.
- Tesla, Nikola, LL.D., 55 W. 27th St., New York, N. Y. (43). 1895. **B**
- Thomas, Benjamin F., Ph.D., State University, Columbus, Ohio (29). 1882. **B A**
- Thomas, Prof. M. B., Crawfordsville, Ind. (41). 1894. **G**
- Thompson, Joseph Osgood, Amherst, Mass. (41). 1893.
- Thomson, Elihu, Thomson-Houston Electric Co., Lynn, Mass. (37). 1888. **B**
- Thomson, Wm., M.D., 1426 Walnut St., Philadelphia, Pa. (33). 1885. **B**
- Thornburg, Charles L., Prof. Math. and Astron., Lehigh University, S. Bethlehem, Pa. (44). 1897. **A**
- Thruston, Gates Phillips, Nashville, Tenn. (38). 1890. **H**
- Thruston, R. C. Ballard, care Ballard & Ballard Co., Louisville, Ky. (36). 1896. **E**
- Thurston, Prof. R. H., Sibley College, Cornell University, Ithaca, N. Y. (23). 1875. **D**
- (74)

- Tittmann, Otto H., U. S. Coast and Geodetic Survey Office, Washington, D. C. (24). 1888. **A**
- Todd, Prof. David P., Director Lawrence Observatory, Amherst College, Amherst, Mass. (27). 1881. **A B D**
- Todd, Prof. James E., Box 22, Vermilion, S. Dak. (22). 1886. **E F**
- Tooker, William Wallace, Sag Harbor, N. Y. (43). 1895. **H**
- Tracy, Sam'l M., Biloxi, Miss. (27). 1881. **G**
- Traphagen, Frank W., Ph.D., Bozeman, Montana (35). 1889. **C F E**
- Trelease, Dr. Wm., Director Missouri Botanical Gardens, St. Louis, Mo. (39). 1891. **G**
- Trenholm, Hon. W. L., President American Surety Co., 160 Broadway, New York, N. Y. (35). 1896.
- Trimble, Prof. Henry, 145 N. 10th St., Philadelphia, Pa. (34). 1889. **C**
- True, Fred W., National Museum, Washington, D. C. (28). 1882. **F**
- Tucker, Willis G., M.D., Albany Med. College, Albany, N. Y. (29). 1888. **C**
- TUCKERMAN, ALFRED, Ph.D., 342 W. 57th St., New York, N. Y. (39). 1891. **C**
- Twitchell, E., 10 Bellevue Ave., Mt. Auburn, Cincinnati, Ohio (39). 1891. **C**
- Uhler, Philip R., 254 W. Hoffman St., Baltimore, Md. (19). 1874. **F E**
- Underwood, Lucien M., Prof. of Botany, Columbia University, New York, N. Y. (33). 1885. **G**
- Upham, Warren, Librarian of the Minnesota Historical Society, St. Paul, Minn. (25). 1880. **E**
- Upton, Winslow, Brown University, Providence, R. I. (29). 1883. **A**
- Van Dyck, Prof. Francis Cuyler, New Brunswick, N. J. (28). 1882. **B C F**
- Van Hise, Charles R., University of Wisconsin, Madison, Wis. (37). 1890.
- Van Vleck, Prof. John M., Wesleyan University, Middletown, Conn. (23). 1875. **A**
- Veeder, Major Albert, M.D., Lyons, Wayne Co., N. Y. (36). 1895.
- Venable, Prof. F. P., Chapel Hill, N. C. (39). 1891. **C**
- Vogdes, A. W., Captain 5th Artillery, Fort Mason, San Francisco, Cal. (32). 1885. **E F**
- Voorhees, Louis A., P. O. Box 290, New Brunswick, N. J. (43). 1895. **C**
- Wadsworth, M. Edward, Ph.D., President Michigan College of Mines, and Prof. of Mineralogy, Petrography and Geology, Houghton, Mich. (23). 1874. **E**
- Wagner, Frank C., Rose Polytechnic Institute, Terre Haute, Ind. (34). 1897. **D**
- Waite, M. B., Dep't of Agriculture, Washington, D. C. (37). 1893. **G**
- Walcott, Charles D., Director U. S. Geological Survey, Washington, D. C. (25). 1882. **E F**
- Waldo, Leonard, S. D., 57 Coleman St., Bridgeport, Conn. (28). 1880. **A**
- Wallace, Wm., Ansonia, Conn. (28). 1882.

- WALLER, E., School of Mines, Columbia University, New York, N. Y. (23). 1874.
- Walmsley, W. H., 134-136 Wabash Ave., Chicago, Ill. (28). 1883. **F**
- Ward, Prof. Henry A., Rochester, N. Y. (13). 1875. **FEH**
- Ward, Lester F., U. S. Geological Survey, Washington, D. C. (26). 1879. **EG**
- Ward, Dr. R. H., 53 Fourth St., Troy, N. Y. (17). 1874. **GF**
- Ward, Wm. E., Port Chester, N. Y. (36). 1889. **D**
- Warder, Prof. Robert B., Howard University, Washington, D. C. (19). 1881. **CB**
- WARNER, JAMES D., 199 Baltic St., Brooklyn, N. Y. (18). 1874. **AB**
- Warner, Worcester R., 1722 Euclid Ave., Cleveland, Ohio (33). 1888. **ABD**
- Warren, Dr. Joseph W., Bryn Mawr Coll., Bryn Mawr, Pa. (31). 1886. **F**
- Warren, Prof. S. Edward, Newton, Mass. (17). 1875. **A-I**
- Washington, Dr. Henry S., Locust, N. J. (44). 1897. **E**
- WATSON, PROF. WM., 107 Marlborough St., Boston, Mass. (12). 1884. **A**
- Webb, Prof. J. Burkitt, Stevens Inst., Hoboken, N. J. (31). 1883. **DBA**
- Weber, Prof. Henry A., Ohio State Univ., Columbus, Ohio (35). 1888. **F**
- Webster, F. M., Wooster, Ohio (35). 1890. **F**
- Webster, Prof. N. B., Vineland, N. J. (7). 1874. **BCE**
- Weed, Clarence M., Durham, N. H. (38). 1890. **F**
- Weld, Prof. Laenas G., State University of Iowa, Iowa City, Iowa (41). 1895. **A**
- WEST, DR. CHARLES E., Brooklyn, N. Y. (1). 1895.
- Weston, Edward, 645 High St., Newark, N. J. (33). 1887. **BCD**
- White, David, U. S. Geological Survey, Washington, D. C. (40). 1892. **EF**
- White, Prof. H. C., University of Georgia, Athens, Ga. (29). 1885. **C**
- WHITE, PROF. I. C., University of West Virginia, Morgantown, W. Va. (25). 1882. **E**
- Whiteaves, J. F., Geological Survey, Ottawa, Ontario, Can. (31). 1887. **EF**
- Whitfield, J. Edward, 406 Locust St., Philadelphia, Pa. (44). 1896. **C**
- Whitfield, R. P., American Museum Natural History, 77th St. and 8th Avenue, New York, N. Y. (18). 1874. **EFH**
- Whiting, Miss Sarah F., Wellesley College, Wellesley, Mass. (31). 1883. **BA**
- Whitman, Prof. Frank P., Adelbert College, Cleveland, Ohio (33). 1885. **AB**
- Wiley, Prof. Harvey W., Department of Agriculture, Washington, D.C. (21). 1874. **C**
- Williams, Benezette, 171 La Salle St., Chicago, Ill. (33). 1887. **D**
- Williams, Charles H., M.D., 15 Arlington St., Boston, Mass. (22). 1874.
- Williams, Prof. Edw. H., jr., 117 Church St., Bethlehem, Pa. (25). 1894. **ED**
- Williams, Francis H., M.D., 505 Beacon St., Boston, Mass. (29). 1890.
- Williams, Prof. Henry Shaler, Yale University, New Haven, Conn. (18). 1882. **EF**
- (76)

- Williams, Prof. Thomas A., Division of Agrostology, Department of Agriculture, Washington, D. C. (42). 1894. **G**
- Willis, Bailey, U. S. Geological Survey, Washington, D. C. (36). 1890.
- Willoughby, Charles C., Peabody Museum, Cambridge, Mass. (45). 1897. **H**
- Willson, Prof. Frederick N., Princeton, N. J. (33). 1887. **AD**
- Willson, Robert W., Cambridge, Mass. (30). 1890. **BA**
- Wilson, Joseph M., Room 1036, Drexel Building, Philadelphia, Pa. (33). 1886. **D**
- Wilson, Robert N., Macleod, Alberta, Can. (42). 1895. **H**
- Wilson, Thomas, National Museum, Washington, D. C. (36). 1888. **H**
- Wilson, Prof. William Powell, Director, Philadelphia Museums, 233 S. Fourth St., Philadelphia, Pa. (38). 1889. **G**
- Winchell, Horace V., 1306 S. E. 7th St., Minneapolis, Minn. (34). 1890. **EC**
- Winchell, Prof. N. H., University of Minnesota, Minneapolis, Minn. (19). 1874. **EH**
- Winterhalter, A. G., Lt. U. S. N., care Navy Department, Washington, D. C. (37). 1893. **A**
- Withers, Prof. W. A., Agricultural and Mechanical College, Raleigh, N. C. (33). 1891. **C**
- Witthaus, Dr. R. A., 414 East 26th St., New York, N. Y. (35). 1890.
- Wolff, Dr. J. E., 15 Story St., Cambridge, Mass. (36). 1894. **E**
- Woll, Fritz Wilhelm, Madison, Wis. (42). 1897. **C**
- Woodbury, C. J. H., Amer. Bell Telephone Co., 125 Milk St., Boston Mass. (29). 1884. **D**
- Woodman, Dr. Durand, 80 Beaver St., New York, N. Y. (41). 1896.
- Woodrow, James, President South Carolina College, Columbia, S. C. (43). 1895. **E**
- Woods, Albert F., Dep't of Agriculture, Washington, D. C. (43) 1897. **G**
- Woodward, Prof. Calvin M., 1761 Missouri Ave., St. Louis, Mo. (32). 1884. **DAI**
- Woodward, R. S., Columbia University, New York, N. Y. (33). 1885. **ABD**
- Wrampelmeier, Theo. J., Room 17, Appraiser's Building, San Francisco, Cal. (34). 1887. **C**
- Wright, Prof. Albert A., Oberlin College, Oberlin, Ohio (24). 1880. **EF**
- Wright, Prof. Arthur W., Yale University, New Haven, Conn. (14). 1874. **AB**
- Wright, Carroll D., LL.D., Department of Labor, Washington, D. C. 1894. **I**
- Wright, Rev. Geo. F., Oberlin College, Oberlin, Ohio (29). 1882. **EH**
- Würtele, Rev. Louis C., Acton Vale, P. Q., Can. (11). 1875. **E**
- Youmans, Wm. Jay, M.D., Popular Science Monthly, 72 Fifth Ave., New York, N. Y. (28). 1889. **FC**
- Young, A. V. E., Northwestern University, Evanston, Ill. (33). 1886. **CB**

Young, C. A., Prof. of Astronomy, Princeton University, Princeton, N. J.
(18). 1874. **A B D**

Zalinski, E. L., U. S. A., Century Club, 7 W. 43d St., New York, N. Y.
(36). 1891. **D**

Ziwet, Alexander, 44 Madison St., Ann Arbor, Mich. (38). 1890. **A**

[772 HONORARY FELLOWS AND FELLOWS.]

SUMMARY.—PATRONS, 2; CORRESPONDING MEMBER, 1; MEMBERS, 869; HONORARY
FELLOWS, 2; FELLOWS, 770.

AUGUST 9, 1898, TOTAL NUMBER OF MEMBERS OF THE ASSOCIATION, 1644.

(78)

506
AMA
1899

(48)

CONSTITUTION
LIST OF MEETINGS
OFFICERS
COMMITTEES AND MEMBERS
OF
The American Association
FOR THE
ADVANCEMENT OF SCIENCE,
FOR THE FORTY-EIGHTH MEETING
HELD AT
COLUMBUS, OHIO
AUGUST, 1899
PUBLISHED BY THE PERMANENT SECRETARY
1899

AL. OF HL. 1899

CONSTITUTION

LIST OF MEETINGS

OFFICERS

COMMITTEES AND MEMBERS

ERRATUM SLIP TO BE INSERTED IN VOL. 47.

Add to list of officers of Section I on page 472: "Press Secretary, William H. Hale."

AUGUST, 1899

PUBLISHED BY THE PERMANENT SECRETARY

1899

CONSTITUTION

LIST OF MEETINGS

OFFICERS

COMMITTEES AND MEMBERS

OF

The American Association

FOR THE

ADVANCEMENT OF SCIENCE,

FOR THE FORTY-EIGHTH MEETING

HELD AT

COLUMBUS, OHIO

AUGUST, 1899

PUBLISHED BY THE PERMANENT SECRETARY

1899

EDITED BY
L. O. HOWARD,
Permanent Secretary.

The Chemical Publishing Company.
EASTON, PA.
1899.

506
AMA
1899

Officers of the Columbus Meeting.

PRESIDENT.

EDWARD ORTON,
Ohio State University, Columbus, Ohio.

VICE PRESIDENTS.

- A. **Mathematics and Astronomy**—ALEXANDER MACFARLANE, Lehigh University, South Bethlehem, Pa.
- B. **Physics**—ELIHU THOMSON, Lynn, Mass.
- C. **Chemistry**—F. P. VENABLE, University of North Carolina, Chapel Hill, N. C.
- D. **Mechanical Science and Engineering**—STORM BULL, University of Wisconsin, Madison, Wis.
- E. **Geology and Geography**—J. F. WHITEAVES, Geological Survey of Canada, Ottawa, Canada.
- F. **Zoology**—S. H. GAGE, Cornell University, Ithaca, N. Y.
- G. **Botany**—CHARLES R. BARNES, University of Chicago, Chicago, Ill.
- H. **Anthropology**—THOMAS WILSON, Smithsonian Institution, Washington, D. C.
- I. **Social and Economic Science**—MARCUS BENJAMIN, U. S. National Museum, Washington, D. C.

PERMANENT SECRETARY.

L. O. HOWARD, Cosmos Club, Washington, D. C.

GENERAL SECRETARY.

FREDERICK BEDELL, Cornell University, Ithaca, N. Y.

SECRETARY OF THE COUNCIL.

CHARLES BASKERVILLE, University of North Carolina, Chapel Hill, N. C.

SECRETARIES OF THE SECTIONS.

- A. **Mathematics and Astronomy**—JOHN F. HAYFORD, U. S. Coast & Geodetic Survey, Washington, D. C.
- B. **Physics**—WILLIAM HALLOCK, Columbia University, New York, N. Y.

- C. **Chemistry**—H. A. WEBER, Ohio State University, Columbus, O.
- D. **Mechanical Science and Engineering**—JAMES M. PORTER, Lafayette College, Easton, Pa.
- E. **Geology and Geography**—ARTHUR HOLLICK, Columbia University, New York, N. Y.
- F. **Zoology**—C. C. NUTTING, Iowa City, Iowa. (In place of F. W. True, resigned.)
- G. **Botany**—W. A. KELLERMAN, Ohio State University, Columbus, Ohio.
- H. **Anthropology**—GEORGE A. DORSEY, Field Columbian Museum, Chicago, Ill.
- I. **Social and Economic Science**—CALVIN M. WOODWARD, Washington University, St. Louis, Mo.

TREASURER.

R. S. WOODWARD, Columbia University, New York, N. Y.

Members of the Council.

Past Presidents—SIMON NEWCOMB, Washington ; GEORGE F. BARKER, Philadelphia ; GEORGE J. BRUSH, New Haven ; J. W. DAWSON, Montreal ; C. A. YOUNG, Princeton ; J. P. LESLEY, Philadelphia ; EDWARD S. MORSE, Salem ; SAMUEL P. LANGLEY, Washington ; J. W. POWELL, Washington ; T. C. MENDENHALL, Worcester ; GEORGE L. GOODALE, Cambridge ; ALBERT B. PRESCOTT, Ann Arbor ; JOSEPH LECONTE, Berkeley ; WILLIAM HARKNESS, Washington ; DANIEL G. BRINTON, Media ; EDWARD W. MORLEY, Cleveland ; THEODORE GILL, Washington ; WOLCOTT GIBBS, Newport ; F. W. PUTNAM, Cambridge.

Vice Presidents of the Boston Meeting—E. E. BARNARD, Green Bay ; FRANK P. WHITMAN, Cleveland ; EDGAR F. SMITH, Philadelphia ; JOHN GALBRAITH, Toronto ; H. L. FAIRCHILD, Rochester ; A. S. PACKARD, Providence ; W. G. FARLOW, Cambridge ; J. MCK. CATTELL, New York ; ARCHIBALD BLUE, Toronto.

Officers of the Columbus Meeting—EDWARD ORTON, Columbus ; ALEXANDER MACFARLANE, South Bethlehem ; ELIHU THOMSON, Lynn ; F. P. VENABLE, Chapel Hill ; STORM BULL, Madison ; J. F. WHITEAVES, Ottawa ; S. H. GAGE, Ithaca ; C. R. BARNES, Chicago ; THOMAS WILSON, Washington ; MARCUS BENJAMIN, Washington ; L. O. HOWARD, Washington ; FREDERICK BEDELL, Ithaca ; CHARLES BASKERVILLE, Chapel Hill ; JOHN F. HAYFORD, Washington ; WILLIAM HALLOCK, New York ; W. A. WEBER, Columbus ; JAMES M. PORTER, Easton ; ARTHUR HOLICK, New York ; C. C. NUTTING, Iowa City ; W. A. KELLERMAN, Columbus ; GEORGE A. DORSEY, Chicago ; CALVIN M. WOODWARD, St. Louis ; R. S. WOODWARD, New York.

From the Association at Large—To hold over until successors are elected. A fellow from each section.—E. C. PICKERING, Cambridge, (A) ; H. S. CARHART, Ann Arbor, (B) ; F. W. CLARKE, Washington, (C) ; J. B. JOHNSON, St. Louis, (D) ; I. C. WHITE, Morgantown, (E) ; W. H. DALL, Washington, (F) ; W. W. ROWLEE, Ithaca, (G) ; ALICE C. FLETCHER, Cambridge, (H) ; W. R. LAZENBY, Columbus, (I).

Local Committee of the Columbus Meeting.

HONORARY PRESIDENT.

HIS EXCELLENCY, ASA. S. BUSHNELL, GOVERNOR OF OHIO.

HONORARY VICE-PRESIDENTS.

DR. HOWARD AYRES,	-	President of the University of Cincinnati
DR. A. B. BAKER,	- - -	President of Mount Union College
DR. J. H. BARROWS,	- - - -	President of Oberlin College
DR. J. W. BASHFORD,	- -	President of Ohio Wesleyan University
GEN'L R. BRINKERHOFF,	-	President of the Ohio Archæological and Historical Society
DR. JAS. H. CANFIELD,	- -	President of Ohio State University
DR. J. H. CHAMBERLAIN,	- - -	Dean of Marietta College
DR. J. M. DAVIS,	- - -	President of Rio Grande College
MR. L. G. ELI,	- -	President of the State Board of Agriculture
MR. E. A. KEMMLER,	-	President of the Ohio Institute of Civil Engi- neers and Surveyors.
PROF. W. R. LAZENBY,	-	Pres't of the Columbus Horticultural Society
DR. D. A. LONG,	- - - -	President of Antioch College
MR. O. A. MILLER,	-	President of the Columbus Board of Trade
DR. S. A. ORR,	- - -	President of Wittenberg College
PROF. EDWARD ORTON, Jr.,	-	Pres't of the Engineers' Club of Columbus
DR. J. A. PETERS,	- - -	President of Heidelberg University
REV. N. F. PIERCE,	- - - -	President of Kenyon College
REV. IRA A. PRIEST,	- - -	President of Buchtel College
DR. C. O. PROBST,	- - -	Secretary of State Board of Health
DR. D. B. PURINTON,	- - -	President of Denison University
PROF. F. A. RAY,	-	Pres't of the Ohio Institute of Mining Engineers
DR. T. J. SAUNDERS,	- -	President of Otterbein University
DR. W. H. SCOTT,	- -	Ex-President of Ohio State University
DR. S. F. SCOVEL,	- - -	President of Wooster University
HON. J. McLAIN SMITH,	-	President of the Board of Trustees Ohio State University.
DR. CADEY STALEY,		President of the Case School of Applied Science
DR. CHAS. W. SUPER,	- - - -	President of Ohio University
HON. SAMUEL J. SWARTZ,	- - - -	Mayor of Columbus
DR. CHAS. F. THWING	-	President of Western Reserve University
DR. W. O. THOMPSON	- - -	President of Miami University
DR. M. F. WARNER,	- - -	President of Baldwin University
PROF. G. F. WRIGHT	-	President of the Ohio Academy of Sciences
DR. E. V. ZOLLERS,	- - - -	President of Hiram College

EXECUTIVE OFFICERS.

HON. HENRY C. TAYLOR, CHAIRMAN.
 PROF. B. F. THOMAS, LOCAL SECRETARY.
 FRANK L. KIESEWETTER, TREASURER.

MEMBERS AT LARGE.

Dr. O. W. Aldrich	Mr. George W. Lattimer
Dr. O. Arnold	Mr. Leo Lesquereux
Mr. R. C. Anderson	Mr. C. M. Lewis
Hon. D. C. Badger	Mr. Philip Lindenberg
Rev. H. H. Barbour	Mr. W. P. Little
Mr. G. H. Bargar	Dr. Starling Loving
Dr. J. U. Barnhill	Capt. Alfred E. Lee
Hon. John Beatty	Mr. Daniel McAllister
Hon. Thos. M. Bigger	Mr. W. C. McAllister
Hon. Samuel Black	Mr. Jonas M. McCune
Mr. J. E. Blackburn	Mr. Emerson McMillin
Mr. Jacob Bleile	Hon. Jason McVay
Mr. F. F. Bonnett	Mr. W. A. Mahony
Mr. W. G. Bowland	Dr. W. J. Means
Mr. H. E. Bradley	Mr. J. W. Meeks
Mr. Herbert Brooks	Mr. Frank W. Merrick
Hon. Philip Bruck	Mr. John F. Miller
Mr. E. J. Brush	Mr. W. H. Miller
Mr. Wm. F. Burdell	Mr. T. Ewing Miller
Mr. Luke J. Byrne	Mr. W. W. Miller
Mr. Joseph C. Campbell	Mr. E. T. Mithoff
Mr. John Cashatt	Mr. J. W. Mooney
Mr. S. Casparis	Rev. Wm. E. Moore
Mr. H. T. Chittenden	Mr. Nicholas Monsarrat
Dr. N. F. Coleman	Mr. J. S. Morton
Col. A. B. Coit	Capt. L. D. Myers
Mr. J. H. Collins	Hon. George K. Nash
Mr. J. W. Dages	Major Henry M. Neil
Col. W. N. P. Darrow	Mr. Moses H. Neil
Mr. F. A. Davis	Mr. Jas. W. Nitschke
Mr. Wm. G. Deshler	Mr. Henry O'Kane
Dr. H. J. Detmers	Rev. W. H. Oldham
Mr. John Dunn	Hon. Jas. Olds
Mr. Lee Durstine	Mr. J. D. Osborn
Hon. E. P. Evans	Hon. Selwyn N. Owen
Mr. Wm. Felton	Mr. Chas. Parrott

Dr. C. B. Ferrell	Mr. John M. Pugh
Mr. Louish Fieser	Dr. T. W. Rankin
Mr. Wm. Fish	Mr. A. K. Rarig
Mr. W. W. Franklin	Mr. Theodore Rhodes
Dr. E. B. Fullerton	Mr. Thomas H. Ricketts
Mr. Robert C. Fulton	Mr. S. S. Rickley
Mr. E. B. Gager	Mr. C. H. D. Robbins
Mr. Geo. W. Gill	Hon. A. D. Rodgers
Mr. Herbert R. Gill	Dr. W. K. Rodgers
Rev. Washington Gladden	Mr. Nicholas Schlee
Dr. L. T. Guerin	Mr. John J. Schwartz
Mr. Henry Gumble	Mr. E. E. Shedd
Rev. C. Haddaeus	Mr. C. C. Shepherd
Mr. W. H. Halliday	Mr. John Siebert
Dr. W. D. Hamilton	Capt. R. S. Smith
Mr. Archie N. Hammond	Hon. W. T. Spear
Mr. Jas. B. Hanna	Mr. Frank A. Stallman
Hon. R. A. Harrison	Mr. Samuel Stevens
Dr. Samuel B. Hartman	Mr. J. J. Stoddard
Mr. F. E. Hayden	Dr. D. E. Sullivan
Dr. Edward Herbst	Rev. A. A. E. Taylor
Rev. John Hewitt	Dr. A. P. Taylor
Mr. O. C. Higgins	Mr. E. L. Taylor
Mr. E. A. Hildreth	Mr. Orrin Thacker
Mr. J. T. Holmes	Mr. Adolph Theobald
Mr. George Hoster	Mr. A. W. Thurman
Mr. E. N. Huggins	Mr. C. O. Tracy
Mr. Ivor Hughes	Mr. Geo. H. Twiss
Mr. Cyrus Huling	Mr. M. E. Thrailkill
Mr. Chas. O. Hunter	Mr. George C. Urlin
Mr. B. N. Huntington	Mr. V. C. Ward
Mr. Felix A. Jacobs	Hon. D. K. Watson
Rev. Joseph Jessing	Mr. James Watson
Mr. John Joyce, Sr.	Dr. H. W. Whittaker
Mr. L. B. Kauffman	Dr. E. E. White
Mr. T. J. Keating	Mr. Z. L. White
Col. James Kilbourne	Hon. A. T. Wikoff
Mr. W. B. Kimball	Mr. C. L. Williams
Mr. W. R. Kinnear	Hon. M. J. Williams
Dr. D. N. Kinsman	Hon. C. C. Williams
Mr. Albert Knopf	Dr. E. F. Wilson
Mr. George C. Krauss	Dr. E. J. Wilson
Mr. Alex. Krumm	Dr. C. C. Wright
Mr. Henry Lanman	Mr. J. W. Yost

RECEPTION COMMITTEE.

MR. P. W. HUNTINGTON, Chairman.

Mr. F. F. D. Alberry	Mr. Paul Jones
Prof. Chas. E. Albright	Mr. F. C. Kelton
Dr. J. F. Baldwin	Prof. George W. Knight
Capt. B. L. Bargar	Mr. A. P. Lathrop
Prof. C. S. Barrett	Mr. Fred Lazarus
Prof. R. D. Bohannon	Hon. John J. Lentz
Hon. L. D. Bonebrake	Mr. T. P. Linn
Hon. H. J. Booth	Prof. H. C. Lord
Mr. H. Braun	Mr. James M. Loren
Prof. Abram S. Brown	Mr. Caleb L. McKee
Mr. Thomas J. Bryce	Mr. Miller McDonald
Mr. Chas. E. Burr	Prof. R. W. McFarland
Mr. C. P. L. Butler	Dr. D. L. Moore
Dr. W. B. Carpenter	Mr. Chas. S. Mayers
Dr. C. F. Clark	Mr. D. B. Neil
Mr. E. G. Coffin	Mr. F. L. Packard
Hon. O. T. Corson	Mr. H. C. Park
Hon. H. M. Daugherty	Mr. Neils M. Peterson
Prof. J. V. Denny	Mr. F. J. Picard
Mr. H. G. Dennison	Mr. R. H. Platt
Prof. S. C. Derby	Gen. T. E. Powell
Mr. John G. Deshler	Hon. David F. Pugh
Dr. G. A. Doren	Prof. S. W. Robinson
Hon. T. J. Duncan	Col. J. L. Rodgers
Dr. J. M. Dunham	Hon. Daniel J. Ryan
Dr. L. M. Early	Mr. J. E. Sater
Mr. Frank C. Eaton	Hon. John A. Schauck
Prof. C. D. Everett	Dr. Erwin Scheuller
Mr. A. W. Field	Mr. F. M. Sessions
Hon. T. B. Galloway	Prof. J. A. Shawan
Mr. Martin A. Gemunder	Mr. Frank R. Shinn
Dr. T. D. Gilliam	Prof. W. H. Siebert
Mr. W. D. Gilbert	Prof. J. R. Smith
Dr. Chas. S. Hamilton	Mr. E. K. Stewart
Mr. Fred Heer	Hon. G. H. Stewart
Mr. W. O. Henderson	Maj. L. S. Sullivant
Dr. T. C. Hoover	Mr. John M. Taylor
Dr. Curtis C. Howard	Hon. Emmet Tompkins
Mr. F. C. Hubbard	Mr. James C. Ulrick
Hon. N. R. Hysell	Dr. R. W. Wallace
Mr. Edward Johnson	Mr. R. S. Warner
Mr. George D. Jones	Dr. G. M. Waters
Prof. J. W. Jones	Mr. Benjamin Woodbury

LADIES' RECEPTION COMMITTEE.

MRS. A. D. RODGERS, Chairman.

Mrs. F. F. D. Alberry	Mrs. Henry A. Lanman
Mrs. Allen C. Barrows	Mrs. W. R. Lazenby
Mrs. J. Y. Bassell	Mrs. H. C. Lord
Mrs. Samuel L. Black	Mrs. N. W. Lord
Mrs. Albert M. Bleile	Mrs. W. T. Magruder
Mrs. R. D. Bohannon	Mrs. Wm. McPherson
Mrs. H. J. Booth	Mrs. Wm. Monypenny
Mrs. Benj. L. Bowen	Mrs. D. B. Neil
Mrs. W. D. Brickell	Mrs. J. B. Neil
Mrs. C. N. Brown	Mrs. Sydney A. Norton
Mrs. W. E. Burdell	Mrs. Edward Orton
Mrs. James H. Canfield	Mrs. Edward Orton, Jr
Mrs. Frederick C. Clark	Mrs. J. D. Osborn
Mrs. Francis Collins	Mrs. Joseph H. Outhwaite
Mrs. Alexis Cope	Mrs. G. S. Parsons
Mrs. Edward Denmead	Mrs. R. H. Platt
Mrs. Joseph V. Denney	Mrs. F. A. Ray
Mrs. John G. Deshler	Mrs. E. O. Randall
Mrs. T. J. Duncan	Mrs. T. H. Ricketts
Mrs. Ernst. A. Eggers	Mrs. R. M. Rownd
Mrs. Washington Gladden	Mrs. Wm. H. Scott
Mrs. W. F. Goodspeed	Mrs. Amor W. Sharp
Mrs. John P. Gordy	Mrs. E. R. Sharp
Mrs. Chas. G. Henderson	Mrs. Mary J. Shinn
Mrs. W. O. Henderson	Mrs. George Sinks
Mrs. E. N. Huggins	Mrs. Wilbur H. Siebert
Mrs. Thos. F. Hunt	Mrs. Josiah R. Smith
Mrs. P. W. Huntington	Mrs. George T. Spahr
Mrs. Grosvenor Hutchins	Miss Jane Sullivant
Miss Olive Jones	Mrs. Samuel J. Swartz
Mrs. Paul Jones	Mrs. Frank Tallmadge
Mrs. John Joyce	Mrs. Henry C. Taylor
Mrs. George Kauffman	Mrs. Benj. F. Thomas
Mrs. William W. Kellerman	Miss Harriet Townshend
Mrs. Alfred Kelly	Miss Catherine Tuttle
Mrs. F. C. Kelton	Mrs. R. S. Warner
Mrs. James Kilbourne	Mrs. D. K. Watson
Mrs. L. G. Kilbourne	Mrs. Henry A. Weber
Mrs. George W. Knight	

COMMITTEE OF FINANCE.

MR. W. D. PARK, Chairman.

Mr. W. H. Alberry	Mr. Carl L. Hoster
Mr. Cotton H. Allen	Mr. J. R. Hughes
Mr. J. H. Anderson	Mr. J. A. Jeffrey
Mr. W. H. Andrews	Mr. W. H. Jones
Mr. John Y. Bassell	Mr. Frank Louis Kiesewetter
Mr. C. Born, Jr.	Hon. Jas. R. Kilbourne
Mr. Geo. W. Bright	Mr. Thos. E. Knauss
Mr. Irwin Butterworth	Mr. Ralph Lazarus
Hon. Wm. T. Cope	Mr. Charles Lindenburg
Mr. John G. Deshler	Mr. Claude Meeker
Mr. J. W. Dusenbury	Mr. O. A. Miller
Col. J. D. Ellison	Mr. Chas. E. Morris
Mr. C. D. Firestone	Mr. Chas. E. Munson
Mr. R. M. Gilbert	Hon. John F. Oglevee
Mr. H. C. Godman	Hon. J. H. Outhwaite
Major W. E. Goodspeed	Mr. F. W. Prentiss
Mr. D. S. Gray	Mr. E. R. Sharp
Mr. W. A. Hardesty	Mr. Robert E. Sheldon
Hon. L. D. Hagerty	Mr. John Siebert
Dr. S. B. Hartman	Mr. Geo. W. Sinks
Hon. A. D. Heffner	Mr. Julius F. Stone
Hon. E. L. Hinman	Mr. W. R. Walker

COMMITTEE ON EXCURSIONS.

MR. E. O. RANDALL, Chairman.

MR. W. C. MILLS, Secretary.

Mr. N. B. Abbott	Prof. W. A. Kellerman
Mr. W. V. Baker	Prof. N. W. Lord
Mr. Geo. F. Bareis	Hon. John B. Neil
Mr. E. A. Cole	Mr. Fred C. Rector
Mr. John G. Deshler	Mr. L. P. Stephens
Hon. Louis B. Gunkel	Dr. F. C. Stillman
Mr. T. Guthrie	Dr. A. A. Thoman
Mr. R. M. Haseltine	Prof. W. G. Tight
Dr. S. M. Hatton	Mr. Harry D. Turney
Mr. O. C. Hooper	Dr. Frank Warner
Mr. Frank Howe	Mr. W. H. Williams
Mr. Robert H. Jeffrey	Mr. E. F. Wood
Mr. J. O. Johnston	Prof. G. Frederic Wright

COMMITTEE ON RAILROADS AND TRANSPORTATION.

MR. EDWARD DENMEAD, Chairman.

Mr. E. T. Affleck	Mr. Allen Hull
Mr. E. C. Beach	Hon. Raymond S. Kaylor
Prof. C. N. Brown	Mr. W. F. Kelley
Mr. L. W. Buckmaster	Mr. Chas. Krotzenberger
Mr. S. P. Bush	Prof. N. W. Lord
Mr. W. H. Fisher	Mr. D. S. Wilder
Mr. J. M. Harris	Mr. C. E. Winterringer
Mr. R. M. Haseltine	

COMMITTEE ON HOTELS.

PROF. B. F. THOMAS, Chairman.

MR. S. N. FIELDS, Secretary.

Mr. W. F. Andrus	Mr. Frank L. Hughes
Mr. W. G. Benham	Mr. Peter Merkle
Prof. J. A. Bownocker	Mr. O. H. Perry
Mr. Robert Candy	Mr. H. C. Pirrung
Mr. O. M. Evans	Mr. David Westwater

COMMITTEE ON PRINTING FOR ASSOCIATION.

PROF. EDWARD ORTON, JR., Chairman.

Mr. O. E. D. Barron	Mr. J. W. Howard
Capt. Alexis Cope	Mr. F. W. Hubbard
Mr. Julian Griggs	Mr. George C. Ruggles
Mr. George Hardy	Mr. W. C. Wallace
Mr. George Hasbrook	

COMMITTEE ON ROOMS FOR MEETINGS.

PROF. THOMAS F. HUNT, Chairman.

MR. W. C. McCracken, Secretary.

Mr. H. B. Arnold	Prof. W. T. Magruder
Prof. F. C. Caldwell	Prof. H. Osborn
Mr. Jos. H. Dunn	Prof. F. A. Ray
Prof. W. R. Lazenby	Mr. Nelson A. Sims
Prof. Wm. McPherson	Mr. George T. Spahr

COMMITTEE ON LUNCHEON AT THE UNIVERSITY.

PROF. H. A. WEBER, Chairman.

Dr. A. M. Bleile	Prof. Edward Orton, Jr.
Prof. James E. Boyd	Prof. Wm. McPherson
Mr. O. R. Flynn	Prof. John H. Shaffner
Prof. W. D. Gibbs	Prof. J. R. Smith
Prof. George B. Kauffman	Prof. K. D. Swartzel
Prof. George W. Knight	Prof. David S. White

COMMITTEE ON PRESS AND TELEGRAPH.

MR. GEO. T. SPAHR, Chairman.

Mr. W. D. Brickell	Mr. Samuel G. McClure
Mr. George W. Dunn	Mr. Henry A. Reinhard
Mr. Shepherd M. Dunlap	Mr. F. P. Ross
Mr. Leo Hirsch	Mr. Robert O. Ryder
Mr. W. P. Huntington	Mr. W. A. Taylor
Mr. John A. Kuster	Mr. W. L. Truesdell
Mr. Chas. M. Lewis	

COMMITTEE ON MAIL AND EXPRESS.

MR. R. M. ROWND, Chairman.

MR. J. F. CUNNINGHAM, Secretary,

Mr. Geo. J. Abbott	Mr. P. W. Darling
Prof. C. N. Brown	Mr. J. McGreevy
Prof. F. C. Clark	Prof. F. E. Sanborn
Mr. J. T. Clark	

EXECUTIVE COMMITTEE.

HON. HENRY C. TAYLOR, Chairman.

PROF. B. F. THOMAS, Secretary.

Mr. E. O. Denmead	Mr. E. O. Randall
Prof. T. F. Hunt	Mr. R. M. Rownd
Mr. P. W. Huntington	Mr. Geo. T. Spahr
Prof. Edward Orton, Jr.	Prof. B. F. Thomas
Mr. W. D. Park	Prof. H. A. Weber

Special Committees of the Association.¹

1. *Auditors.*

EMORY MCCLINTOCK, Morristown, and G. K. GILBERT, Washington.

2. *Committee on Indexing Chemical Literature.*

H. CARRINGTON BOLTON, *Chairman*, F. W. CLARKE, A. R. LEEDS, H. W. WILEY, J. W. LANGLEY, A. B. PRESCOTT, ALFRED TUCKERMAN.

3. *Committee on the Association Table in Biological Laboratory at Wood's Holl.*

THE OUTGOING AND INCOMING VICE PRESIDENTS OF SECTIONS F and G, and C. O. WHITMAN, Chicago.

4. *Committee on the Policy of the Association.*

THE PRESIDENT, *Chairman*, THE PERMANENT SECRETARY, THE TREASURER, T. C. MENDENHALL, WILLIAM KENT, WM. H. BREWER.

5. *Committee on Standards of Measurements.*

T. C. MENDENHALL, *Chairman*, E. W. MORLEY, E. L. NICHOLS, R. S. WOODWARD, H. A. ROLAND, H. S. CARHART. With power to add to its number.

6. *Committee on Standard Colors and Standard Nomenclature of Colors.*

O. N. ROOD, *Chairman*, W. LeCONTE STEVENS, WM. HALLOCK.

7. *Committee on the Association Library.*

ALFRED SPRINGER, *Chairman*, A. W. BUTLER, W. L. DUDLEY, T. H. NORTON, THOMAS FRENCH, JR.

8. *Committee for the Study of the White Race in America.*

D. G. BRINTON, J. MCK. CATTELL, W. W. NEWELL, W. J. MCGEE, FRANZ BOAS.

9. *Committee to Cooperate with the National Educational Association Regarding the Teaching of Science in the Secondary Schools.*

R. S. TARR, H. S. CARHART, A. S. PACKARD, C. F. MABERY, C. E. BESSEY.

10. *To Represent the Association as Member of the American Advisory Board on an International Code of Zoological Nomenclature.*

A. S. PACKARD.

11. *Committee on Uniform Nomenclature in Scientific Work.*

R. T. COLBURN, *Chairman*, E. S. MORSE, A. B. PRESCOTT, R. S. WOODWARD, L. O. HOWARD.

12. *Committee on Extending the Influence of the Association into the Secondary Schools.*

E. S. MORSE, W. ORR, JR., T. C. CHAMBERLIN.

13. *Committee for the Collection of Information Relative to Forestry.*

W. H. BREWER, *Chairman*, GIFFORD PINCHOT, ARNOLD HAGUE.

14. *Committee on the Increase of the Efficiency of the U. S. Naval Observatory.*

E. C. PICKERING, T. C. MENDENHALL, R. S. WOODWARD.

¹ All Committees are expected to present their reports to the COUNCIL not later than the third day of the meeting. Committees sending their reports to the Permanent Secretary one month before a meeting can have them printed for use at the meeting.

MEETINGS AND OFFICERS OF THE ASSOCIATION OF AMERICAN GEOLOGISTS AND NATURALISTS.

Meeting.	Date.	Place.	Chairman.	Secretary.	Assist. Secretary.	Treasurer.
1st	April 2, 1840,	Philadelphia,	Edw. Hitchcock,*	L. C. Beck,*	{ B. Silliman, Jr.,* C. B. Trego,* J. D. Whitney,* M. B. Williams,*	John Locke.*
2d	April 5, 1841,	Philadelphia,	Benj. Silliman,*	L. C. Beck,*		
3d	April 25, 1842,	Boston,	S. G. Morton,*	C. T. Jackson,*		
4th	April 26, 1843,	Albany,	Henry D. Rogers,*	B. Silliman, Jr.,*		
5th	May 8, 1844,	Washington,	John Locke,*	{ B. Silliman, Jr.,* O. P. Hubbard,*	Douglas Houghton* Douglas Houghton* E. C. Herrick.* B. Silliman, Jr.*	Douglas Houghton* Douglas Houghton* E. C. Herrick.* B. Silliman, Jr.*
6th	April 30, 1845,	New Haven,	Wm. B. Rogers,*	{ B. Silliman, Jr.,* J. Law. Smith,*		
7th	Sept. 2, 1846,	New York,	C. T. Jackson,*	B. Silliman, Jr.,*		
8th	Sept. 20, 1847,	Boston,	Wm. B. Rogers,†*	Jeffries Wyman,*		

* Deceased.

† Professor Rogers, as chairman of this last meeting, called the first meeting of the new Association to order and presided until it was fully organized by the adoption of a constitution. As he was thus the first presiding officer of the new Association, it was directed at the Hartford meeting that his name be placed at the head of the Past Presidents of the American Association for the Advancement of Science.

Meetings.	Place.	Date.	Members in attend- ance.	Number of members.
1	Philadelphia	Sept. 20, 1848	?	461
2	Cambridge	Aug. 14, 1849	?	540
3	Charleston	Mar. 12, 1850	?	622
4	New Haven	Aug. 19, 1850	?	704
5	Cincinnati	May 5, 1851	87	800
6	Albany	Aug. 19, 1851	194	769
7	Cleveland	July 28, 1853	?	940
8	Washington	April 26, 1854	168	1004
9	Providence	Aug. 15, 1855	166	605
10	2nd Albany	Aug. 20, 1856	381	722
11	Montreal	Aug. 12, 1857	351	946
12	Baltimore	April 28, 1858	190	962
13	Springfield	Aug. 3, 1859	190	862
14	Newport	Aug. 1, 1860	135	644
15	Buffalo	Aug. 15, 1866	79	637
16	Burlington	Aug. 21, 1867	73	415
17	Chicago	Aug. 5, 1868	259	686
18	Salem	Aug. 18, 1869	244	511
19	Troy	Aug. 17, 1870	188	536
20	Indianapolis	Aug. 16, 1871	196	668
21	Dubuque	Aug. 15, 1872	164	610
22	Portland	Aug. 20, 1873	195	670
23	Hartford	Aug. 12, 1874	224	722
24	Detroit	Aug. 11, 1875	165	807
25	2nd Buffalo	Aug. 23, 1876	215	867
26	Nashville	Aug. 29, 1877	173	953
27	St. Louis	Aug. 21, 1878	134	962
28	Saratoga	Aug. 27, 1879	256	1030
29	Boston	Aug. 25, 1880	997	1555
30	2nd Cincinnati	Aug. 17, 1881	500	1699
31	2nd Montreal	Aug. 23, 1882	937	1922
32	Minneapolis	Aug. 15, 1883	328	2033
33	2nd Philadelphia	Sept. 3, 1884	1261*	1981
34	Ann Arbor	Aug. 26, 1885	364	1956
35	3d Buffalo	Aug. 18, 1886	445	1886
36	New York	Aug. 10, 1887	729	1956
37	2nd Cleveland	Aug. 14, 1888	342	1964
38	Toronto	Aug. 26, 1889	424	1952
39	2d Indianapolis	Aug. 19, 1890	364	1944
40	2d Washington	Aug. 19, 1891	653†	2054
41	Rochester	Aug. 17, 1892	456	2037
42	Madison	Aug. 17, 1893	290	1939
43	Brooklyn	Aug. 15, 1894	488	1802
44	2d Springfield	Aug. 28, 1895	368	1913
45	4th Buffalo	Aug. 24, 1896	333	1890
46	2d Detroit	Aug. 9, 1897	283‡	1782
47	2d Boston	Aug. 22, 1898	903	1729
48	Columbus	Aug. 21, 1899	—	—

* Including 303 members of the British Association and 9 other foreign guests.

† Including 24 Foreign Honorary members for the meeting.

‡ Including 15 Foreign Honorary members and associates for the meeting.

Officers of the Meetings of the Association.

[The number before the name is that of the meeting ; the year of the meeting follows the name ; the asterisk after a name indicates that the member is deceased.]

PRESIDENTS.

- | | |
|-----------------------------------|----------------------------------|
| 1. { WM. B. ROGERS,* 1848. | 26. SIMON NEWCOMB, 1877. |
| { W. C. REDFIELD,* 1848. | 27. O. C. MARSH,* 1878. |
| 2. JOSEPH HENRY,* 1849. | 28. G. F. BARKER, 1879. |
| 3, 4, 5. A. D. BACHE,* March | 29. LEWIS H. MORGAN,* 1880. |
| meeting, 1850, in absence of | 30. G. J. BRUSH, 1881. |
| JOSEPH HENRY.* August meet- | 31. J. W. DAWSON, 1882. |
| ing, 1850. May meeting, 1851. | 32. C. A. YOUNG, 1883. |
| 6. LOUIS AGASSIZ,* August meet- | 33. J. P. LESLEY, 1884. |
| ing, 1851. | 34. H. A. NEWTON,* 1885. |
| (No meeting in 1852.) | 35. EDWARD S. MORSE, 1886. |
| 7. BENJAMIN PIERCE,* 1853. | 36. S. P. LANGLEY, 1887. |
| 8. JAMES D. DANA,* 1854. | 37. J. W. POWELL, 1888. |
| 9. JOHN TORREY,* 1855. | 38. T. C. MENDENHALL, 1889. |
| 10. JAMES HALL,* 1856. | 39. G. LINCOLN GOODALE, 1890. |
| 11, 12. ALEXIS CASWELL,* 1857, | 40. ALBERT B. PRESCOTT, 1891. |
| in place of J. W. BAILEY,* de- | 41. JOSEPH LECONTE, 1892. |
| ceased. 1858, in absence of | 42. WILLIAM HARKNESS, 1893. |
| JEFFRIES WYMAN.* | 43. DANIEL G. BRINTON, 1894. |
| 13. STEPHEN ALEXANDER,* 1859. | 44. E. W. MORLEY, 1895. |
| 14. ISAAC LEA,* 1860. | { EDWARD D. COPE,* 1896. |
| (No meetings for 1861-65.) | THEODORE GILL, as senior |
| 15. F. A. P. BARNARD,* 1866. | 45. { vice president acted after |
| 16. J. S. NEWBERRY,* 1867. | the death of Prof. COPE. |
| 17. B. A. GOULD,* 1868. | 46. WOLCOTT GIBBS, 1897, absent. |
| 18. J. W. FOSTER,* 1869. | W J MCGEE, Acting President. |
| 19. T. STERRY HUNT,* 1870, in the | 47. F. W. PUTNAM, 1898. |
| absence of WM. CHAUVENET.* | 48. EDWARD ORTON, 1899. |
| 20. ASA GRAY,* 1871. | |
| 21. J. LAWRENCE SMITH,* 1872. | |
| 22. JOSEPH LOVERING,* 1873. | |
| 23. J. L. LECONTE,* 1874. | |
| 24. J. E. HILGARD,* 1875. | |
| 25. WILLIAM B. ROGERS,* 1876. | |

VICE PRESIDENTS.

There were no Vice Presidents until the 11th meeting when there was a single Vice President for each meeting. At the 24th meeting the Association met in Sections A and B, each presided over by a Vice President. At the 31st meeting nine sections were organized, each with a Vice President as its presiding officer. In 1886, Section G (Microscopy) was given up. In 1892, Section F was divided into F, Zoology ; G, Botany.

1857-1874.

- | | |
|---|--|
| 11. ALEXIS CASWELL,* 1857, acted as President. | 17. CHARLES WHITTLESEY,* 1868. |
| 12. JOHN E. HOLBROOK,* 1858, not present. | 18. OGDEN N. ROOD, 1869. |
| 13. EDWARD HITCHCOCK,* 1859. | 19. T. STERRY HUNT,* 1870, acted as President. |
| 14. B. A. GOULD,* 1860. | 20. G. F. BARKER, 1871. |
| 15. B. A. GOULD,* 1866, in absence of R. W. GIBBES. | 21. ALEXANDER WINCHELL,* 1872. |
| 16. WOLCOTT GIBBS, 1867. | 22. A. H. WORTHEN,* 1873, not present. |
| | 23. C. S. LYMAN,* 1874. |

1875-1881.

Section A.—Mathematics, Physics, and Chemistry.

24. H. A. NEWTON,* 1875.
25. C. A. YOUNG, 1876.
26. R. H. THURSTON, 1877, in the absence of E. C. PICKERING.
27. R. H. THURSTON, 1878.
28. S. P. LANGLEY, 1879.
29. ASAPH HALL, 1880.
30. WILLIAM HARKNESS, 1881, in the absence of A. M. MAYER.*

Section B.—Natural History.

24. J. W. DAWSON, 1875.
25. EDWARD S. MORSE, 1876.
26. O. C. MARSH, 1877.
27. AUG. R. GROTE, 1878.
28. J. W. POWELL, 1879.
29. ALEXANDER AGASSIZ, 1880.
30. EDWARD T. COX, 1881, in the absence of GEORGE ENGELMANN.*

CHAIRMEN OF SUBSECTIONS, 1875-1881.

Subsection of Chemistry.

24. S. W. JOHNSON, 1875.
25. G. F. BARKER, 1876.
26. N. T. LUPTON,* 1877.
27. F. W. CLARKE, 1878.
28. F. W. CLARKE, 1879, in the absence of IRA REMSEN.
29. J. M. ORDWAY, 1880.
30. G. C. CALDWELL, 1881, in the absence of W. R. NICHOLS.*

Subsection of Microscopy.

25. R. H. WARD, 1876.
26. R. H. WARD, 1877.
27. R. H. WARD, 1878, in the absence of G. S. BLACKIE.*

28. E. W. MORLEY, 1879.

29. S. A. LATTIMORE, 1880.

30. A. B. HERVEY, 1881.

Subsection of Anthropology.

24. LEWIS H. MORGAN,* 1875.
25. LEWIS H. MORGAN,* 1876.
26. DANIEL WILSON,* 1877, not present.
27. United with Section B.
28. DANIEL WILSON,* 1879.
29. J. W. POWELL, 1880.
30. GARRICK MALLERY,* 1881.

Subsection of Entomology.

30. J. G. MORRIS,* 1881.

VICE PRESIDENTS OF SECTIONS, 1882-

Section A.—Mathematics and Astronomy.

31. W. A. ROGERS,* 1882, in the absence of W. M. HARKNESS.
32. W. A. ROGERS, 1883.
33. H. T. EDDY, 1884.
34. W. M. HARKNESS, 1885, in the absence of J. M. VAN VLECK.
35. J. W. GIBBS, 1886.
36. J. R. EASTMAN, 1887, in place of W. FERREL,* resigned.
37. ORMOND STONE, 1888.
38. R. S. WOODWARD, 1889.
39. S. C. CHANDLER, 1890.
40. E. W. HYDE, 1891.
41. J. R. EASTMAN, 1892.
42. C. L. DOOLITTLE, 1893.
43. { G. C. COMSTOCK, 1894.
EDGAR FRISBY, 1894.
44. EDGAR FRISBY, 1895, in place of E. H. HOLDEN, resigned.
45. ALEX. MACFARLANE, 1896, in place of W. M. E. STORY, resigned.
46. W. W. BEMAN, 1897.
47. E. E. BARNARD, 1898.
48. ALEX. MACFARLANE, 1899.

Section B.—Physics.

31. T. C. MENDENHALL, 1882.
32. H. A. ROWLAND, 1883.
33. J. TROWBRIDGE, 1884.
34. S. P. LANGLEY, 1885, in place of C. F. BRACKETT, resigned.
35. C. F. BRACKETT, 1886.
36. W. A. ANTHONY, 1887.
37. A. A. MICHELSON, 1888.
38. H. S. CARHART, 1889.
39. CLEVELAND ABBE, 1890.
40. F. E. NIPHER, 1891.
41. B. F. THOMAS, 1892.
42. E. L. NICHOLS, 1893.
43. W. M. A. ROGERS, 1894.
44. W. LECONTE STEVENS, 1895.
45. CARL LEO MEES, 1896.

46. CARL BARUS, 1897.
47. F. P. WHITMAN, 1898.
48. ELIHU THOMSON, 1899.

Section C.—Chemistry.

31. H. C. BOLTON, 1882.
32. E. W. MORLEY, 1883.
33. J. W. LANGLEY, 1884.
34. N. T. LUPTON,* 1885, in absence of W. R. NICHOLS.*
35. H. W. WILEY, 1886.
36. A. B. PRESCOTT, 1887.
37. C. E. MUNROE, 1888.
38. W. L. DUDLEY, 1889.
39. R. B. WARDER, 1890.
40. R. C. KEDZIE, 1891.
41. ALFRED SPRINGER, 1892.
42. EDWARD HART, 1893.
43. T. H. NORTON, 1894.
44. W. M. MCMURTRIE, 1895.
45. W. A. NOYES, 1896.
46. W. P. MASON, 1897.
47. EDGAR F. SMITH, 1898.
48. F. P. VENABLE, 1899.

Section D.—Mechanical Science and Engineering.

31. W. P. TROWBRIDGE,* 1882.
32. DE VOLSON WOOD, 1883, absent, but place was not filled.
33. R. H. THURSTON, 1884.
34. J. BURKITT WEBB, 1885.
35. O. CHANUTE, 1886.
36. E. B. COXE, 1887.
37. C. J. H. WOODBURY, 1888.
38. JAMES E. DENTON, 1889.
39. JAMES E. DENTON, 1890, in place of A. BEARDSLEY, absent.
40. THOMAS GRAY, 1891.
41. J. B. JOHNSON, 1892.
42. S. W. ROBINSON, 1893.
43. MANSFIELD MERRIMAN, 1894.
44. WILLIAM KENT, 1895.
45. FRANK O. MARVIN, 1896.
46. JOHN GALBRAITH, 1897.

VICE PRESIDENTS OF SECTIONS, CONTINUED.

Section D.—Mechanical Science and Engineering, continued.

47. JOHN GALBRAITH, 1898, in absence of M. E. COOLEY.
48. STORM BULL, 1899.

Section E.—Geology and Geography.

31. E. T. COX, 1882.
32. C. H. HITCHCOCK, 1883.
33. N. H. WINCHELL, 1884.
34. EDWARD ORTON, 1885.
35. T. C. CHAMBERLIN, 1886.
36. G. K. GILBERT, 1887.
37. GEORGE H. COOK,* 1888.
38. CHARLES A. WHITE, 1889.
39. JOHN C. BRANNER, 1890.
40. J. J. STEVENSON, 1891.
41. H. S. WILLIAMS, 1892.
42. CHARLES D. WALCOTT, 1893.
43. SAMUEL CALVIN, 1894.
44. JED. HOTCHKISS, 1895.
45. B. K. EMERSON, 1896.
46. { I. C. WHITE, 1897.
E. W. CLAYPOLE, 1897.
47. H. L. FAIRCHILD, 1898.
48. J. F. WHITEAVES, 1899.

Section F.—Biology, 1882-92.

31. W. H. DALL, 1882.
32. W. J. BEAL, 1883.
33. E. D. COPE,* 1884.
34. T. J. BURRILL, 1885, in the absence of B. G. WILDER.
35. H. P. BOWDITCH, 1886.
36. W. G. FARLOW, 1887.
37. C. V. RILEY,* 1888.
38. GEORGE L. GOODALE, 1889.
39. C. S. MINOT, 1890.
40. J. M. COULTER, 1891.
41. S. H. GAGE, 1892.

Section F.—Zoology.

42. HENRY F. OSBORN, 1893.
43. J. A. LINTNER, 1894, in place of S. H. SCUDDER, resigned.

44. L. O. HOWARD, 1895, in place of D. S. JORDAN, resigned.
45. THEO. GILL, 1896.
46. L. O. HOWARD, 1897, in place of G. BROWN GOODE,* deceased.
47. A. S. PACKARD, 1898.
48. S. H. GAGE, 1899.

Section G.—Microscopy, 1882-85.

31. A. H. TUTTLE, 1882.
 32. J. D. COX, 1883.
 33. T. G. WORMLEY,* 1884.
 34. S. H. GAGE, 1885.
- (Section united with F in 1886.)

Section G.—Botany.

42. CHARLES E. BESSEY, 1893.
43. { L. M. UNDERWOOD, 1894.
C. E. BESSEY, 1894.
44. J. C. ARTHUR, 1895.
45. N. L. BRITTON, 1896.
46. G. F. ATKINSON, 1897.
47. W. G. FARLOW, 1898.
48. C. R. BARNES, 1899.

Section H.—Anthropology.

31. ALEXANDER WINCHELL,* 1882.
32. OTIS T. MASON, 1883.
33. EDWARD S. MORSE, 1884.
34. J. OWEN DORSEY,* 1885, in absence of W. H. DALL.
35. HORATIO HALE,* 1886.
36. D. G. BRINTON, 1887.
37. CHARLES C. ABBOTT, 1888.
38. GARRICK MALLERY,* 1889.
39. FRANK BAKER, 1890.
40. JOSEPH JASTROW, 1891.
41. W. H. HOLMES, 1892.
42. J. OWEN DORSEY,* 1893.
43. FRANZ BOAS, 1894.
44. F. H. CUSHING, 1895.
45. ALICE C. FLETCHER, 1896.
46. W J MCGEE, 1897.
47. J. McK. CATTELL, 1898.
48. THOMAS WILSON, 1899.

VICE PRESIDENTS OF SECTIONS, CONTINUED.

Section I.—Social and Economic Science.

- | | |
|-------------------------------|---|
| 31. E. B. ELLIOTT,* 1882. | 40. EDMUND J. JAMES, 1891. |
| 32. FRANKLIN B. HOUGH,* 1883. | 41. L. F. WARD, 1892, in place of
S. D. HORTON,* resigned. |
| 33. JOHN EATON,* 1884. | 42. WILLIAM H. BREWER, 1893. |
| 34. EDWARD ATKINSON, 1885. | 43. HENRY FARQUHAR, 1894. |
| 35. JOSEPH CUMMINGS,* 1886. | 44. B. E. FERNOW, 1895. |
| 36. H. E. ALVORD, 1887. | 45. W. L. LAZENBY, 1896. |
| 37. CHARLES W. SMILEY, 1888. | 46. R. T. COLBURN, 1897. |
| 38. CHARLES S. HILL, 1889. | 47. ARCHIBALD BLUE, 1898. |
| 39. J. RICHARDS DODGE, 1890. | 48. MARCUS BENJAMIN, 1899. |

SECRETARIES.

General Secretaries, 1848—

- | | |
|---|--|
| 1. WALTER R. JOHNSON,* 1848. | 23. A. C. HAMLIN, 1874. |
| 2. E. N. HORSFORD,* 1849, in ab-
sence of JEFFRIES WYMAN.* | 24. S. H. SCUDDER, 1875. |
| 3. L. R. GIBBS, 1850, in absence
of E. C. HERRICK.* | 25. T. C. MENDENHALL, 1876. |
| 4. E. C. HERRICK,* 1850. | 26. AUG. R. GROTE, 1877. |
| 5. WILLIAM B. ROGERS,* 1851, in
absence of E. C. HERRICK.* | 27. H. C. BOLTON, 1878. |
| 6. WILLIAM B. ROGERS,* 1851. | 28. H. C. BOLTON, 1879, in the ab-
sence of GEORGE LITTLE. |
| 7. S. ST. JOHN,* 1853, in absence
of J. D. DANA.* | 29. J. K. REES, 1880. |
| 8. J. LAWRENCE SMITH,* 1854. | 30. C. V. RILEY,* 1881. |
| 9. WOLCOTT GIBBS, 1855. | 31. WILLIAM SAUNDERS, 1882. |
| 10. B. A. GOULD,* 1856. | 32. J. R. EASTMAN, 1883. |
| 11. JOHN LECONTE,* 1857. | 33. ALFRED SPRINGER, 1884. |
| 12. W. M. GILLESPIE,* 1858, in ab-
sence of WM. CHAUVENET.* | 34. C. S. MINOT, 1885. |
| 13. WILLIAM CHAUVENET,* 1859. | 35. S. G. WILLIAMS, 1886. |
| 14. JOSEPH LECONTE, 1860. | 36. WILLIAM H. PETTEE, 1887. |
| 15. ELIAS LOOMIS,* 1866, in the
absence of W. P. TROW-
BRIDGE.* | 37. JULIUS POHLMAN, 1888. |
| 16. C. S. LYMAN,* 1867. | 38. C. LEO MEES, 1889. |
| 17. SIMON NEWCOMB, 1868, in ab-
sence of A. P. ROCKWELL. | 39. H. C. BOLTON, 1890. |
| 18. O. C. MARSH,* 1869. | 40. H. W. WILEY, 1891. |
| 19. F. W. PUTNAM, 1870, in ab-
sence of C. F. HARTT.* | 41. A. W. BUTLER, 1892. |
| 20. F. W. PUTNAM, 1871. | 42. T. H. NORTON, 1893. |
| 21. EDWARD S. MORSE, 1872. | 43. H. L. FAIRCHILD, 1894. |
| 22. C. A. WHITE, 1873. | 44. JAS. LEWIS HOWE, 1895. |
| | 45. CHARLES R. BARNES, 1896. |
| | 46. ASAPH HALL, JR., 1897. |
| | 47. J. MCMAHON, 1898, in place of
D. S. KELLICOTT,* deceased. |
| | 48. F. BEDELL, 1899. |

Permanent Secretaries, 1851—

- | |
|----------------------------------|
| 5-7. SPENCER F. BAIRD,* 1851-4. |
| 8-17. JOSEPH LOVERING,* 1854-68. |

SECRETARIES, CONTINUED.

18. F. W. PUTNAM, 1869, in the absence of J. LOVERING.*
 19-21. JOSEPH LOVERING, 1870-73.
 22-46. F. W. PUTNAM, 1873-98.
 47-48. L. O. HOWARD, 1898-99.
Assistant General Secretaries,
 1882-1887.
31. J. R. EASTMAN, 1882.
 32. ALFRED SPRINGER, 1883.
 33. C. S. MINOT, 1884, in absence of E. S. HOLDEN.
 34. S. G. WILLIAMS, 1885, in absence of C. C. ABBOTT.
 35. W. H. PETTEE, 1886.
 36. J. C. ARTHUR, 1887.
Secretaries of the Council, 1888-
37. C. LEO MEES, 1888.
 38. H. C. BOLTON, 1889.
 39. H. W. WILEY, 1890.
 40. A. W. BUTLER, 1891.
 41. T. H. NORTON, 1892.
 42. H. LEROY FAIRCHILD, 1893.
 43. JAS. LEWIS HOWE, 1894.
 44. CHARLES R. BARNES, 1895.
 45. ASAPH HALL, JR., 1896.
46. D. S. KELLICOTT,* 1897.
 47. FREDERICK BEDELL, 1898.
 48. CHARLES BASKERVILLE, 1899.
Secretaries of Section A.—Mathematics, Physics, and Chemistry,
 1875-81.
24. { S. P. LANGLEY, 1875.
 { T. C. MENDENHALL, 1875.
 25. A. W. WRIGHT, 1876.
 26. H. C. BOLTON, 1877.
 27. F. E. NIPHER, 1878.
 28. J. K. REES, 1879.
 29. H. B. MASON, 1880.
 30. E. T. TAPPAN, 1881, in the absence of JOHN TROWBRIDGE.
Secretaries of Section B.—Natural History, 1874-81.
24. EDWARD S. MORSE, 1875.
 25. ALBERT H. TUTTLE, 1876.
 26. WILLIAM H. DALL, 1877.
 27. GEORGE LITTLE, 1878.
 28. WILLIAM H. DALL, 1879, in the absence of A. C. WETHERBY.
 29. CHARLES V. RILEY,* 1880.
 30. WILLIAM SAUNDERS, 1881.

SECRETARIES OF SUBSECTIONS, 1875-81.

Subsection of Chemistry.

24. F. W. CLARKE, 1875.
 25. H. C. BOLTON, 1876.
 26. P. SCHWEITZER, 1877.
 27. A. P. S. STUART, 1878.
 28. W. R. NICHOLS,* 1879.
 29. C. E. MUNROE, 1880.
 30. ALFRED SPRINGER, 1881, in absence of R. B. WARDER.

Subsection of Entomology.

30. B. P. MANN, 1881.

Subsection of Anthropology.

24. F. W. PUTNAM, 1875.
 25. OTIS T. MASON, 1876.
 26, 27. United with Section B.
 28, 29, 30. J. G. HENDERSON,
 1879-81.

Subsection of Microscopy.

25. E. W. MORLEY, 1876.
 26. T. O. SOMMERS, JR., 1877.
 27. G. J. ENGELMANN, 1878.
 28, 29. A. B. HERVEY, 1879-80.
 30. W. H. SEAMAN, 1881, in the absence of S. P. SHARPLES.

SECRETARIES OF THE SECTIONS, 1882-

Section A.—Mathematics and Astronomy.

31. H. T. EDDY, 1882.
 32. G. W. HOUGH, 1883, in the absence of W. W. JOHNSON.

33. G. W. HOUGH, 1884.
 34. E. W. HYDE, 1885.
 35. S. C. CHANDLER, 1886.
 36. H. M. PAUL, 1887.
 37. C. C. DOOLITTLE, 1888.

SECRETARIES OF SECTIONS, CONTINUED.

Section A.—Mathematics and Astronomy, continued.

38. G. C. COMSTOCK, 1889.
39. W. W. BEMAN, 1890.
40. F. H. BIGELOW, 1891.
41. WINSLOW UPTON, 1892.
42. C. A. WALDO, 1893, in the absence of A. W. PHILLIPS.
43. J. C. KERSHNER, 1894, in place of W. W. BEMAN, resigned.
44. ASAPH HALL, JR., 1895, in place of E. H. MOORE, resigned.
45. EDWIN B. FROST, 1896.
46. JAMES MCMAHON, 1897.
47. WINSLOW UPTON, 1898, in place of ALEXANDER ZIWET, resigned.
48. JOHN F. HAYFORD, 1899.
33. H. CARMICHAEL, 1884, in the absence of R. B. WARDER.
34. F. P. DUNNINGTON, 1885.
35. W. MCMURTRIE, 1886.
36. C. F. MABERY, 1887.
37. W. L. DUDLEY, 1888.
38. EDWARD HART, 1889.
39. W. A. NOYES, 1890.
40. T. H. NORTON, 1891.
41. JAS. LEWIS HOWE, 1892.
42. H. N. STOKES, 1893, in the absence of J. U. NEF.
43. MORRIS LOEB, 1894, in place of S. M. BABCOCK, resigned.
44. { W. P. MASON, 1895.
W. O. ATWATER, 1895.
45. FRANK P. VENABLE, 1896.
46. P. C. FREER, 1897.
47. C. BASKERVILLE, 1898.
48. H. A. WEBER, 1899.

Section B.—Physics.

31. C. S. HASTINGS, 1882.
32. F. E. NIPHER, 1883, in the absence of C. K. WEAD.
33. N. D. C. HODGES, 1884.
34. B. F. THOMAS, 1885, in place of A. A. MICHELSON, resigned.
35. H. S. CARHART, 1886.
36. C. LEO MEES, 1887.
37. ALEX. MACFARLANE, 1888.
38. E. L. NICHOLS, 1889.
39. E. M. AVERY, 1890.
40. ALEX. MACFARLANE, 1891.
41. BROWN AYRES, 1892.
42. W. LeCONTE STEVENS, 1893.
43. B. W. SNOW, 1894.
44. E. MERRITT, 1895.
45. FRANK P. WHITMAN, 1896.
46. FREDERICK BEDELL, 1897.
47. W. S. FRANKLIN, 1898, in place of E. B. ROSA, resigned.
48. WILLIAM HALLOCK, 1899.

Section C.—Chemistry.

31. ALFRED SPRINGER, 1882.
32. { J. W. LANGLEY, 1883.
W. MCMURTRIE, 1883.

Section D.—Mechanical Science and Engineering.

31. J. BURKITT WEBB, 1882, in the absence of C. B. DUDLEY.
32. J. BURKITT WEBB, 1883, *pro tempore*.
33. J. BURKITT WEBB, 1884.
34. C. J. H. WOODBURY, 1885.
35. WILLIAM KENT, 1886.
36. G. M. BOND, 1887.
37. ARTHUR BEARDSLEY, 1888.
38. W. B. WARNER, 1889.
39. THOMAS GRAY, 1890.
40. WILLIAM KENT, 1891.
41. O. H. LANDRETH, 1892.
42. D. S. JACOBUS, 1893.
43. JOHN H. KINEALY, 1894.
44. H. S. JACOBY, 1895.
45. JOHN GALBRAITH, 1896.
46. JOHN J. FLATHER, 1897.
47. W. S. ALDRICH, 1898.
48. J. M. PORTER, 1899.

SECRETARIES OF THE SECTIONS, CONTINUED.

Section E.—Geology and Geography.

31. H. S. WILLIAMS, 1882, in the absence of C. E. DUTTON.
32. A. A. JULIEN, 1883.
33. E. A. SMITH, 1884.
34. G. K. GILBERT, 1885, in the absence of H. C. LEWIS.*
35. E. W. CLAYPOLE, 1886.
36. W. M. DAVIS, 1887, in the absence of T. B. COMSTOCK.
37. JOHN C. BRANNER, 1888.
38. JOHN C. BRANNER, 1889.
39. SAMUEL CALVIN, 1890.
40. W J MCGEE, 1891.
41. R. D. SALISBURY, 1892.
42. W. H. HOBBS,* 1893, in place of R. T. HILL, resigned.
43. JED. HOTCHKISS,* 1894, in place of W. M. DAVIS, resigned.
44. J. PERRIN SMITH, 1895.
45. W. N. RICE, 1896, in place of A. C. GILL, resigned.
46. C. H. SMITH, JR., 1897.
47. WARREN UPHAM, 1898.
48. ARTHUR HOLLICK, 1899.

Section F.—Biology, 1882-92.

31. WILLIAM OSLER, 1882, in the absence of C. S. MINOT.
32. S. A. FORBES, 1883.
33. C. E. BESSEY, 1884.
34. J. A. LINTNER, 1885, in place of C. H. FERNALD, resigned.
35. J. C. ARTHUR, 1886.
36. J. H. COMSTOCK, 1887.
37. B. H. FERNOW, 1888.
38. A. W. BUTLER, 1889.
39. J. M. COULTER, 1890.
40. A. J. COOK, 1891.
41. D. B. HALSTEAD, 1892.

Section F.—Zoology.

42. L. O. HOWARD, 1893.

43. JOHN B. SMITH, 1894, in place of WM. LIBBY, JR., resigned.
44. C. W. HARGITT, 1895, in place of S. A. FORBES, resigned.
45. D. S. KELLICOTT, 1896.
46. C. C. NUTTING, 1897.
47. R. T. JACKSON, 1898, in place of C. W. STILES, resigned.
48. C. C. NUTTING, 1899, in place of F. W. TRUE, resigned.

Section G.—Microscopy, 1882-85.

31. ROBERT BROWN, JR., 1882.
32. CARL SEILER, 1883.
33. ROMYN HITCHCOCK, 1884.
34. W. H. WALMSLEY, 1885.

Section G.—Botany.

42. B. T. GALLOWAY, 1893, in the absence of F. V. COVILLE.
43. CHARLES R. BARNES, 1894.
44. { B. T. GALLOWAY, 1895.
M. B. WAITE, 1895.
45. GEORGE F. ATKINSON, 1896.
46. F. C. NEWCOMBE, 1897.
47. ERWIN F. SMITH, 1898.
48. W. A. KELLERMAN, 1899.

Section H.—Anthropology.

31. OTIS T. MASON, 1882.
32. G. H. PERKINS, 1883.
33. G. H. PERKINS, 1884, in the absence of W. H. HOLMES.
34. ERMINNIE A. SMITH,* 1885.
35. A. W. BUTLER, 1886.
36. CHARLES C. ABBOTT, 1887, in absence of F. W. LANGDON.
37. FRANK BAKER, 1888.
38. W. M. BEAUCHAMP, 1889.
39. JOSEPH JASTROW, 1890.
40. W. H. HOLMES, 1891.
41. W. M. BEAUCHAMP, 1892, in place of S. CULIN, resigned.
42. WARREN K. MOOREHEAD, 1893.
43. A. F. CHAMBERLIN, 1894.

SECRETARIES OF THE SECTIONS, CONTINUED.

*Section H.—Anthropology,
continued.*

44. { STEWART CULIN and W. W.
TOOKER, 1895, in place of
ANITA N. MCGEE, re-
signed.
45. G. H. PERKINS, 1896, in place
of J. G. BOURKE,* deceased.
46. ANITA N. MCGEE, 1897, in place
of HARLAN I. SMITH, re-
signed.
47. MARSHALL H. SAVILLE, 1898.
48. GEORGE A. DORSEY, 1899.

*Section I.—Social and Economic
Science.*

31. { FRANKLIN B. HOUGH,* 1882.
J. RICHARDS DODGE, 1882.
32. JOSEPH CUMMINGS,* 1883.

33. CHARLES W. SMILEY, 1884.
34. CHARLES W. SMILEY, 1885, in
absence of J. W. CHICKERING.
35. H. E. ALVORD, 1886.
36. W. R. LAZENBY, 1887.
37. CHARLES S. HILL, 1888.
38. J. RICHARDS DODGE, 1889.
39. B. E. FERNOW, 1890.
40. B. E. FERNOW, 1891.
41. HENRY FARQUHAR, 1892, in
place of L. F. WARD, made
Vice President.
42. NELLIE S. KEDZIE, 1893.
43. MANLEY MILES, 1894.
44. W. R. LAZENBY, 1895, in place
of E. A. ROSS, resigned.
45. R. T. COLBURN, 1896.
46. ARCHIBALD BLUE, 1897.
47. MARCUS BENJAMIN, 1898.
48. CALVIN M. WOODWARD, 1899.

TREASURERS.

1. JEFFRIES WYMAN,* 1848.
2. A. L. ELWYN,* 1849.
3. ST. J. RAVENEL,* 1850, in the
absence of A. L. ELWYN.*
4. A. L. ELWYN,* 1850.
5. SPENCER F. BAIRD,* 1851, in
absence of A. L. ELWYN.*
- 6-7. A. L. ELWYN,* 1851-53.
8. J. L. LECONTE,* 1854, in ab-
sence of A. L. ELWYN.*
- 9-19. A. L. ELWYN,* 1855-1870.
- 20-30. WILLIAM S. VAUX,* 1871-
1881.
- 32-42. WILLIAM LILLY,* 1882-93.
- 43-47. R. S. WOODWARD, 1894-99.

Commonwealth of Massachusetts.

In the Year one Thousand Eight Hundred and Seventy-Four.

AN ACT

TO INCORPORATE THE "AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE."

Be it enacted by the Senate and House of Representatives, in General Court assembled, and by the authority of the same, as follows :

SECTION 1. Joseph Henry of Washington, Benjamin Pierce of Cambridge, James D. Dana of New Haven, James Hall of Albany, Alexis Caswell of Providence, Stephen Alexander of Princeton, Isaac Lea of Philadelphia, F. A. P. Barnard of New York, John S. Newberry of Cleveland, B. A. Gould of Cambridge, T. Sterry Hunt of Boston, Asa Gray of Cambridge, J. Lawrence Smith of Louisville, Joseph Lovering of Cambridge, and John LeConte of Philadelphia, their associates, the officers and members of the Association, known as the "American Association for the Advancement of Science," and their successors, are hereby made a corporation by the name of the "American Association for the Advancement of Science," for the purpose of receiving, purchasing, holding, and conveying real and personal property, which it now is, or hereafter may be, possessed of, with all the powers and privileges, and subject to the restrictions, duties and liabilities set forth in the general laws which now or hereafter may be in force and applicable to such corporations.

SECTION 2. Said corporation may have and hold by purchase, grant, gift, or otherwise, real estate not exceeding one hundred thousand dollars in value, and personal estate of the value of two hundred and fifty thousand dollars.

SECTION 3. Any two of the corporators above named are hereby authorized to call the first meeting of the said corporation in the month of August next ensuing, by notice thereof "by mail," to each member of the said Association.

SECTION 4. This act shall take effect upon its passage.

HOUSE OF REPRESENTATIVES, March 10, 1874.

Passed to be enacted,

JOHN E. SANFORD, *Speaker.*

IN SENATE, March 17, 1874.

Passed to be enacted.

March 19, 1874.

GEO. B. LORING, *President.*

Approved,

W. B. WASHBURN.

SECRETARY'S DEPARTMENT,

Boston, April 3, 1874.

A true copy, Attest :

DAVID PULSIFER,

Deputy Secretary of the Commonwealth.

CONSTITUTION

OF THE

AMERICAN ASSOCIATION FOR THE ADVANCE- MENT OF SCIENCE.

Incorporated by Act of the General Court of the Commonwealth of Massachusetts.

OBJECTS.

ARTICLE 1. The objects of the Association are, by periodical and migratory meetings, to promote intercourse between those who are cultivating science in different parts of America, to give a stronger and more general impulse and more systematic direction to scientific research, and to procure for the labors of scientific men increased facilities and a wider usefulness.

MEMBERS, FELLOWS, PATRONS, AND HONORARY FELLOWS.

ART. 2. The Association shall consist of Members, Fellows, Patrons, Corresponding Members and Honorary Fellows.

ART. 3. Any person may become a Member of the Association upon recommendation in writing by two members or fellows, and election by the Council. Any incorporated scientific society or institution, or any public or incorporated library, may be enrolled as a member of the Association by vote of the Council by payment of the initiation fee; such society, institution or library may be represented by either the President, Curator, Director, or Librarian presenting proper credentials at any meeting of the Association for which the assessment has been paid.

ART. 4. Fellows shall be elected by the Council from such of the members as are professionally engaged in science, or have, by their labors, aided in advancing science. The election of fellows shall be by ballot and a majority vote of the members of the Council at a designated meeting of the Council.

ART. 5. Any person paying to the Association the sum of one thousand dollars shall be classed as a Patron, and shall be entitled to all the privileges of a member and to all its publications.

ART. 6. Honorary Fellows of the Association, not exceeding three for

each section, may be elected; the nominations to be made by the Council and approved by ballot in the respective sections before election by ballot in General Session. Honorary Fellows shall be entitled to all the privileges of Fellows and shall be exempt from all fees and assessments, and entitled to all publications of the Association issued after the date of their election. Corresponding Members shall consist of such scientists not residing in America as may be elected by the Council, and their number shall be limited to fifty. Corresponding Members shall be entitled to all the privileges of members and to the annual volumes of Proceedings published subsequent to their election.

ART. 7. The name of any member or fellow two years in arrears for annual dues shall be erased from the list of the Association, provided that two notices of indebtedness, at an interval of at least three months, shall have been given; and no such person shall be restored until he has paid his arrearages or has been reelected. The Council shall have power to exclude from the Association any member or fellow, on satisfactory evidence that said member or fellow is an improper person to be connected with the Association, or has in the estimation of the Council made improper use of his membership or fellowship.

ART. 8. No member or fellow shall take part in the organization of, or hold office in, more than one section at any one meeting.

OFFICERS.

ART. 9. The officers of the Association shall be elected by ballot by the Nominating Committee from the fellows, and shall consist of a President, a Vice President from each section, a Permanent Secretary, a General Secretary, a Secretary of the Council, a Treasurer, and a Secretary of each Section; these, with the exception of the Permanent Secretary, shall be elected at each meeting for the following one and, with the exception of the Treasurer and the Permanent Secretary, shall not be reeligible for the next two meetings. The term of office of Permanent Secretary shall be five years.

ART. 10. The President, or, in his absence, the senior Vice President present, shall preside at all General Sessions of the Association and at all meetings of the Council. It shall also be the duty of the President to give an address at a General Session of the Association at the meeting following that over which he presided.

ART. 11. The Vice Presidents shall be chairman of their respective Sections, and of their Sectional Committees, and it shall be part of their

duty to give an address, each before his own section, at such time as the council shall determine. The Vice Presidents may appoint temporary Chairmen to preside over the sessions of their sections, but shall not delegate their other duties. The Vice Presidents shall have seniority in order of their continuous membership in the Association.

ART. 12. The General Secretary shall be the Secretary of all General Sessions of the Association, and shall keep a record of the business of these sessions. He shall receive the records from the Secretaries of the Sections, which, after examination, he shall transmit with his own records to the Permanent Secretary within two weeks after the adjournment of the meeting.

ART. 13. The Secretary of the Council shall keep the records of the Council. He shall give to the Secretary of each Section the titles of papers assigned to it by the Council. He shall receive proposals for membership and bring them before the Council.

ART. 14. The Permanent Secretary shall be the executive officer of the Association under the direction of the Council. He shall attend to all business not specially referred to committees nor otherwise constitutionally provided for. He shall keep an account of all business that he has transacted for the Association, and make annually a general report for publication in the annual volume of Proceedings. He shall attend to the printing and distribution of the annual volume of Proceedings, and all other printing ordered by the Association. He shall issue a circular of information to members and fellows at least three months before each meeting, and shall, in connection with the Local Committee, make all necessary arrangements for the meetings of the Association. He shall provide the Secretaries of the Association with such books and stationery as may be required for their records and business, and shall provide members and fellows with such blank forms as may be required for facilitating the business of the Association. He shall collect all assessments and admission fees, and notify members and fellows of their election, and of any arrearages. He shall receive, and bring before the Council, the titles and abstracts of papers proposed to be read before the Association. He shall keep an account of all receipts and expenditures of the Association, and report the same annually at the first meeting of the Council, and shall pay over to the Treasurer such unexpended funds as the Council may direct. He shall receive and hold in trust for the Association all books, pamphlets, and manuscripts belong-

ing to the Association, and allow the use of the same under the provisions of the Constitution and the orders of the Council. He shall receive all communications addressed to the Association during the intervals between meetings, and properly attend to the same. He shall at each meeting report the names of fellows and members who have died since the preceding meeting. He shall be allowed a salary which shall be determined by the Council, and may employ one or more clerks at such compensation as may be agreed upon by the Council.

ART. 15. The Treasurer shall invest the funds received by him in such securities as may be directed by the Council. He shall annually present to the Council an account of the funds in his charge. No expenditure of the principal in the hands of the Treasurer shall be made without a unanimous vote of the Council, and no expenditure of the income received by the Treasurer shall be made without a two-thirds' vote of the Council. The Treasurer shall give bonds for the faithful performance of his duty in such manner and sum as the Council shall from time to time direct.

ART. 16. The Secretaries of the Sections shall keep the records of their respective sections, and, at the close of the meeting, give the same, including the records of subsections, to the General Secretary. They shall also be the Secretaries of the Sectional Committees. The Secretaries shall have seniority in order of their continuous membership in the Association.

ART. 17. In case of a vacancy in the office of the President, one of the Vice Presidents shall be elected by the Council as the President of the meeting. Vacancies in the offices of Vice President, Permanent Secretary, General Secretary, Secretary of the Council, and Treasurer, shall be filled by the Council by ballot. A vacancy in the office of Secretary of a Section shall be filled by nomination and election by ballot in the Section.

ART. 18. The Council shall consist of the past Presidents, and the Vice Presidents of the last meeting, together with the President, the Vice Presidents, the Permanent Secretary, the General Secretary, the Secretary of the Council, the Secretaries of the Sections, and the Treasurer of the current meeting, with the addition of one fellow elected from each Section by ballot on the first day of its meeting. The members present at any regularly called meeting of the Council, provided there are at least five, shall form a quorum for the transaction of business.

The Council shall meet on the day preceding each annual meeting of the Association, and arrange the program for the first day of the sessions. The time and place of this first meeting shall be designated by the Permanent Secretary. Unless otherwise agreed upon, regular meetings of the Council shall be held in the Council room at 9 o'clock, A.M., on each day of the meeting of the Association. Special meetings of the Council may be called at any time by the President. The Council shall be the board of supervision of the Association, and no business shall be transacted by the Association that has not first been referred to, or originated with, the Council. The Council shall receive and assign papers to the respective sections; examine and, if necessary, exclude papers; decide which papers, discussions, and other proceedings shall be published, and have the general direction of the publications of the Association; manage the financial affairs of the Association; arrange the business and programs for General Sessions; suggest subjects for discussion, investigation, or reports; elect members and fellows; and receive and act upon all invitations extended to the Association and report the same at a General Session of the Association. The Council shall receive all reports of Special Committees and decide upon them, and only such shall be read in General Session as the Council shall direct. The Council shall appoint at each meeting the following subcommittees who shall act, subject to appeal to the whole Council, until their successors are appointed at the following meeting: 1, on Papers and Reports; 2, on Members; 3, on Fellows.

ART. 19. The Nominating Committee shall consist of the Council, and one member or fellow elected by each of the Sections. It shall be the duty of this Committee to meet at the call of the President and elect the general officers for the following meeting of the Association. It shall also be the duty of this Committee to fix the time and place for the next meeting. The Vice President and Secretary of each Section shall be recommended to the Nominating Committee by a subcommittee consisting of the Vice President, Secretary, and three members or fellows elected by the Section.

MEETINGS.

ART. 20. The Association shall hold a public meeting annually, for one week or longer, at such time and place as may be determined by vote of the Nominating Committee, and the preliminary arrangements for each meeting shall be made by the Local Committee, in conjunction with

the Permanent Secretary and such other persons as the Council may designate.

ART. 21. A General Session shall be held at 10 o'clock, A. M., on the first day of the meeting, and at such other times as the Council may direct.

SECTIONS AND SUBSECTIONS.

ART. 22. The Association shall be divided into Sections, namely :—A, *Mathematics and Astronomy*; B, *Physics*; C, *Chemistry, including its application to Agriculture and the Arts*; D, *Mechanical Science and Engineering*; E, *Geology and Geography*; F, *Zoology*; G, *Botany*; H, *Anthropology*; I, *Social and Economic Science*. The Council shall have power to consolidate any two or more Sections temporarily, and such consolidated Sections shall be presided over by the senior Vice President and Secretary of the Sections comprising it.

ART. 23. Immediately on the organization of a Section there shall be three fellows elected by ballot after open nomination, who, with the Vice President and Secretary and the Vice President and Secretary of the preceding meeting, shall form its Sectional Committee. The Sectional Committees shall have power to fill vacancies in their own numbers. Meetings of the Sections shall not be held at the same time with a General Session.

ART. 24. The Sectional Committee of any Section may at its pleasure form one or more temporary Subsections, and may designate the officers thereof. The Secretary of a Subsection shall, at the close of the meeting, transmit his records to the Secretary of the Section.

ART. 25. A paper shall not be read in any Section or Subsection until it has been received from the Council and placed on the program of the day by the Sectional Committee.

SECTIONAL COMMITTEES.

ART. 26. The Sectional Committees shall arrange and direct the business of their respective Sections. They shall prepare the daily programs and give them to the Permanent Secretary for printing at the earliest moment practicable. No titles of papers shall be entered on the daily programs except such as have passed the Council. No change shall be made in the program for the day in a Section without the consent of the Sectional Committee. The Sectional Committees may refuse to place the title of any paper on the program; but every such title, with the abstract of the paper or the paper itself, must be returned to the Council with the reasons why it was refused.

ART. 27. The Sectional Committees shall examine all papers and abstracts referred to the Sections, and they shall not place on the program any paper inconsistent with the character of the Association; and to this end they have power to call for any paper, the character of which may not be sufficiently understood from the abstract submitted.

PAPERS AND COMMUNICATIONS.

ART. 28. All members and fellows must forward to the Permanent Secretary, as early as possible, and when practicable before the convening of the Association, full titles of all the papers which they propose to present during the meeting, with a statement of the time that each will occupy in delivery, and also such abstracts of their contents as will give a general idea of their nature; and no title shall be referred by the Council to the Sectional Committee until an abstract of the paper or the paper itself has been received.

ART. 29. If the author of any paper be not ready at the time assigned, the title may be dropped to the bottom of the list.

ART. 30. Whenever practicable, the proceedings and discussions at General Sessions, Sections and Subsections shall be reported by professional reporters but such reports shall not appear in print as the official reports of the Association unless revised by the Secretaries.

PRINTED PROCEEDINGS.

ART. 31. The Permanent Secretary shall have the Proceedings of each meeting printed in an octavo volume as soon after the meeting as possible, beginning one month after adjournment. Authors must prepare their papers or abstracts ready for the press, and these must be in the hands of the Secretaries of the Sections before the final adjournment of the meeting, otherwise only the titles will appear in the printed volume. The Council shall have power to order the printing of any paper by abstract or title only. Whenever practicable, proofs shall be forwarded to authors for revision. If any additions or substantial alterations are made by the author of a paper after its submission to the Secretary, the same shall be distinctly indicated. Illustrations must be provided for by the authors of the papers, or by a special appropriation from the Council. Immediately on publication of the volume, a copy shall be forwarded to every member and fellow of the Association who shall have paid the assessment for the meeting to which it relates, and it shall also be offered for sale by the Permanent Secretary at such price as may be determined

by the Council. The Council shall also designate the institutions to which copies shall be distributed.

LOCAL COMMITTEE.

ART. 32. The Local Committee shall consist of persons interested in the objects of the Association and residing at or near the place of the proposed meeting. It is expected that the Local Committee, assisted by the officers of the Association, will make all essential arrangements for the meeting, and issue a circular giving necessary particulars, at least one month before the meeting.

LIBRARY OF THE ASSOCIATION.

ART. 33. All books and pamphlets received by the Association shall be in the charge of the Permanent Secretary, who shall have a list of the same printed and shall furnish a copy to any member or fellow on application. Members and fellows who have paid their assessments in full shall be allowed to call for books and pamphlets, which shall be delivered to them at their expense, on their giving a receipt agreeing to make good any loss or damage and to return the same free of expense to the Secretary at the time specified in the receipt given. All books and pamphlets in circulation must be returned at each meeting. Not more than five books, including volumes, parts of volumes, and pamphlets, shall be held at one time by any member or fellow. Any book may be withheld from circulation by order of the Council. [The Library of the Association was, by vote of the Council in 1895, placed on deposit in the Library of the University of Cincinnati, Ohio. Members can obtain the use of the books by writing to the Librarian of the University Library, Cincinnati, Ohio.]

ADMISSION FEE AND ASSESSMENTS.

ART. 34. The admission fee for members shall be five dollars in addition to the annual assessment. On the election of any member as a fellow an additional fee of two dollars shall be paid.

ART. 35. The annual assessment for members and fellows shall be three dollars.

ART. 36. Any member or fellow who shall pay the sum of fifty dollars to the Association, at any one time, shall become a Life Member, and as such, shall be exempt from all further assessments, and shall be entitled to the Proceedings of the Association. All money thus received shall be invested as a permanent fund, the income of which, during the life of the

member, shall form a part of the general fund of the Association ; but, after his death, shall be used only to assist in original research, unless otherwise directed by unanimous vote of the Council.

ART. 37. All fees and assessments must be paid to the Permanent Secretary, who shall give proper receipts for the same.

ACCOUNTS.

ART. 38. The accounts of the Permanent Secretary and of the Treasurer shall be audited annually, by Auditors appointed by the Council.

ALTERATIONS OF THE CONSTITUTION.

ART. 39. No part of this Constitution shall be amended or annulled, without the concurrence of three-fourths of the members and fellows present in General Session, after notice given at a General Session of a preceding meeting of the Association.

MEMBERS
OF THE
AMERICAN ASSOCIATION
FOR THE
ADVANCEMENT OF SCIENCE.¹

PATRONS.²

THOMPSON, MRS. ELIZABETH, Stamford, Conn. (22).
LILLY, GEN. WILLIAM, Mauch Chunk, Pa. (28). (Died Dec. 1, 1893.)
HERRMAN, MRS. ESTHER, 59 West 56th St., New York, N. Y. (29).

CORRESPONDING MEMBERS.³

Warington, Robert, F.R.S., Rothamsted, Harpenden, England (40). C

MEMBERS.⁴

Abbe, Cleveland, Jr., care Maryland Geological Survey, Baltimore, Md.
(44). E
Abraham, Abraham, Brooklyn, N. Y. (43).
Abraham, Walter D., 1833 Venango St., Tioga, Philadelphia, Pa. (47).
Adams, Comfort A., Harvard University, Cambridge, Mass. (47).
Adams, C. E., M.D., 29 West Broadway, Bangor, Me. (43). F

¹ The numbers in parentheses indicate the meeting at which the member was elected. The black letters at the end of line indicate the sections to which members belong. The constitution requires that the names of all members two or more years in arrears shall be omitted from the list, but their names will be restored on payment of arrearages. Members not in arrears are entitled to the annual volume of Proceedings bound in paper. *The payment of ten dollars at one time entitles a member to the subsequent volumes to which he may be entitled, bound in cloth, or by the payment of twenty dollars, to such volumes bound in half morocco.*

² Persons contributing one thousand dollars or more to the Association are classed as Patrons, and are entitled to the privileges of members and to the publications.

The names of Patrons are to remain permanently on the list.

³ See ARTICLE VI of the Constitution.

⁴ Any Member or Fellow may become a Life Member by the payment of fifty dollars. The income of the money derived from a life membership is used for the general purposes of the Association during the life of the member; afterwards it is to be used to aid in original research. Life Members are exempt from the annual assessment, and are entitled to the annual volume. The names of Life Members are printed in small capitals in the regular list of Members and Fellows.

- Aldis, Owen F., 230 Monadnock Block, Chicago, Ill. (41). **H**
- Alford, William V., McDonald, Pa. (48). **E H**
- Allderdice, Wm. H., Lieut. U. S. Navy, care Navy Department, Washington, D. C. (33). **D**
- Allen, J. M., Hartford, Conn. (22). **D**
- Allen, Walter S., 34 S. Sixth St., New Bedford, Mass. (39). **C I**
- Anderson, Alexander P., Botanist, Clemson College, S. C. (45). **G**
- Anderson, Frank P., Epworth, Iowa (46).
- Andrews, Wm. C., care Claflin Thayer & Co., P. O. Box 2000, New York, N. Y. (46).
- Anthony, Mrs. Emilia C., Gouverneur, St. Lawrence Co., N. Y. (47). **G**
- Appleton, Rev. Edw. W., D.D., Ashbourne, Montgomery Co., Pa. (28).
- Ashe, W. W., State Geological Survey, Raleigh, N. C. (47).
- Atkinson, Jno. B., Earlington, Hopkins Co., Ky. (26). **D**
- EVERY, SAMUEL P., 4 E. 38th St., New York, N. Y. (36).
- Ayer, Edward Everett, Room 12, The Rookery, Chicago, Ill. (37). **H**
- Ayres, Horace B., Carlton, Minn. (40).
- Baker, A. G., Springfield, Mass. (44).
- Baker, O. M., 499 Main St., Springfield, Mass. (44).
- Baker, Prof. Thos. R., Winter Park, Fla. (47).
- Balch, Samuel W., 41 Wall St., New York, N. Y. (43).
- Baldwin, Mrs. G. H., 3 Madison Ave., Detroit, Mich. (34). **H**
- Baldwin, Herbert B., 906 Broad St., Newark, N. J. (43).
- BALDWIN, S. PRENTISS, 736 Prospect St., Cleveland, Ohio. (47). **E**
- BANGS, LEMUEL BOLTON, M.D., 127 E. 34th St., New York, N. Y. (36).
- Bangs, Outram, 22 Pemberton Square, Boston, Mass. (47). **F**
- BARGE, B. F., Mauch Chunk, Pa. (33).
- Barker, Mrs. Martha M., 26 Eleventh St., Lowell, Mass. (31). **E H**
- Barker, Mrs. Mary E., Collinsville, Conn. (45).
- Barnhart, Arthur M., 185 Monroe St., Chicago, Ill. (42).
- Barrows, Franklin W., 45 Park St. Buffalo, N. Y. (47). **F**
- Barton, George Hunt, 16 Lexington Ave., Cambridge, Mass. (47).
- Barton, Samuel M., Ph.D., School of Mathematics, The University of the South, Sewanee, Tenn. (43). **A**
- Bartow, Edward, Ph.D., Kansas State University, Lawrence, Kan. (47). **C**
- Barwell, John William, Waukegan, Ill. (47).
- Bashore, Dr. Harvey B., West Fairview, Pa. (46). **E**
- Bates, George Williams, 32033 Buhl Block, Detroit, Mich. (46). **H I**
- Bates, Miss Octavie Williams, A.B. LL.M., 53 Bagg St., Detroit, Mich. (47). **I**
- Batterson, J. G., Hartford, Conn. (23).
- Bausch, Henry, P. O. Drawer 1033, Rochester, N. Y. (41).
- Baxter, James N., care H. E. and C. Baxter, cor. Division and Bedford Sts., Brooklyn, N. Y. (36).
- Beach, Spencer Ambrose, N. Y. Experiment Station, Geneva, N. Y. (41). **G**
- Bean, Thos. E., Box 441, Galena, Ill. (28). **F**
- Becher, Franklin A., 406 Irving Place, Milwaukee, Wis. (41). **I A**

- Beckwith, Miss Florence, 394 Alexander St., Rochester, N. Y. (45). **G**
 BELL, C. M., M.D., 320 Fifth Ave., New York, N. Y. (36).
 Benneson, Miss Cora Agnes, A.M., LL.B., 4 Mason St., Cambridge, Mass. (47). **I H**
 Bennett, Rev. N. E., Wilmington, Ohio (47). **A**
 Benneville, James S. de, University Club, 1510 Walnut St., Philadelphia, Pa. (46). **C**
 Bentley, Wilson A., Nashville, Vt. (48).
 Berry, John Wilson, C.E., Pittston, Pa. (47). **A B D E I**
 Bevier, Miss Isabel, Plymouth, Ohio (46). **C**
 Beyer, Samuel W., Iowa Agricultural College, Ames, Ia. (47). **E**
 Bickford, Miss Elizabeth E., Ph.D., Vassar College, Poughkeepsie, N. Y. (46). **F**
 Biddle, James G., 944 Drexel Building, Philadelphia, Pa. (33).
 Bien, Julius, 140 Sixth Ave., New York, N. Y. (34). **E H**
 Biggar, Hamilton F., M.D., 176 Euclid Ave., Cleveland, Ohio (40). **B F**
 BISHOP, HEBER R., Mills Building, New York, N. Y. (36).
 Bitting, Prof. A. W., Purdue Univ. Lafayette, Ind. (46).
 Blair, Mrs. Eliza N., Manchester, N. H. (40).
 Blake, Edwin Mortimer, 230 Washington Ave., Brooklyn, N. Y. (43).
 BLISH, W. G., Niles, Mich. (33). **B D**
 BLOUNT, HENRY FITCH, "The Oaks," Washington, D. C. (32). **I B**
 Bodine, Donaldson, Prof. of Zoology and Geology, Wabash College, Crawfordsville, Ind. (45). **E F**
 Bogert, Marston Taylor, Havemeyer Hall, Columbia University, New York, N. Y. (47). **C**
 Bohannan, Prof. Rosser Daniel, Ohio State University, Columbus, Ohio (46). **A**
 Bolland, Miss Mary A., 117 West Newton St., Boston, Mass. (47).
 Bonwill, W. G. A., D.D.S., 2009 Chestnut St., Philadelphia, Pa. (47). **F H**
 Bookman, Samuel, Ph.D., 9 E. 62nd St., New York, N. Y. (47). **C**
 Booraem, J. V. V., 204 Lincoln Place, Brooklyn, N. Y. (36).
 Borner, William, The Majestic, 52 and 54 Walton Place, Chicago, Ill. (44).
 Boutwell, John Mason, 10 Weld Hall, Cambridge, Mass. (46). **E**
 Bowker, R. R., 28 Elm St., New York, N. Y. (43). **B**
 Bownocker, Prof. J. A., Ohio State University, Columbus, O. (48). **E**
 Boyd, David, A. M., Albion, Mich. (46). **I**
 Boyd, James E., Ohio State Univ., Columbus, Ohio. (46). **B**
 Boyd, Prof. James Harrington, University of Chicago, Chicago, Ill. (47).
A
 Brace, Miss E. M., 40 Cortlandt St., Rochester, N. Y. (47).
 BRACKENRIDGE, GEO. W., San Antonio, Texas. (41). **I**
 Brackett, Byron B., Ph.D., 722 Union St., Schenectady, N. Y. (46). **B**
 Brackett, Solomon H., St. Johnsbury, Vt. (47). **B**
 BRADLEY, ARTHUR C., Newport, N. H. (43).
 Bradley, Charles S., 44 Broad St., New York, N. Y. (40).
 BRADLEY, M. J., 36 Hart St., Brooklyn, N. Y. (43).

- BRADLEY, MILTON, Springfield, Mass. (44). **B**
 Bramwell, Geo. W., 335 Broadway, New York, N. Y. (43). **D**
 Brassill, Miss Sarah Ellen, So. Weymouth, Mass. (47). **G F**
 Brayton, Miss Sarah H., M.D., Evanston, Ill. (33).
 Brice, Judge Albert G., 19 Camp St., New Orleans, La. (32). **H**
 Brigham, Prof. Albert P., Hamilton, Madison Co., N. Y. (41).
 Britton, Wiley, Bureau of Pensions, Springfield, Mo. (40). **F**
 Brown, Robert Marshall, Principal High School, Box 75, Portsmouth,
 N. H. (48).
 Brown, Samuel B., Morgantown, W. Va. (40). **E**
 Brownell, Silas B., 71 Wall St., New York, N. Y. (36).
 Browning, Philip Embury, Kent Chemical Laboratory, Yale University,
 New Haven, Conn. (46). **C**
 Brundage, Albert H., Ph.G., M.D., 1153 Gates Ave., Brooklyn, N. Y.
 (43). **F G H**
 Bryant, Miss D. L., 998 Spring Garden St., Greensboro, N. C. (42). **E**
 Buckingham, Chas. L., 195 Broadway, New York, N. Y. (28).
 Buffum, Prof. Burt C., State University, Laramie, Wyo. (42). **G**
 Burgess, Edward S., 11 W. 88th St., New York, N. Y. (47).
 Burnham, Edward J., Manchester, N. H. (47). **F**
 Burr, Mrs. Laura E., Commercial Hotel, Lansing, Mich. (34). **B**
 Burton, Prof. Alfred E., Massachusetts Institute of Technology, Boston,
 Mass. (40). **E**
 Burwell, Arthur W., Ph.D., 208 Superior St., Cleveland, Ohio. (37).
 Calkins, Dr. Marshall, Springfield, Mass. (29).
 Calvert, Prof. Sidney, M.A., University of Missouri, Columbia, Mo. (47).
C
 Canfield, James Hulme, Pres. Ohio State Univ., Columbus, Ohio. (48). **I**
 Card, Fred W., Kingston, R. I. (45). **G**
 Carpenter, Ford A., U. S. Weather Bureau, San Diego, Cal. (44). **B**
 Carpenter, Geo. O., Jr., care St. Louis Lead and Oil Co., St. Louis, Mo.
 (29).
 CARTER, JAMES C., 277 Lexington Ave., New York, N. Y. (36).
 Carter, John E., Knox and Coulter Sts., Germantown, Pa. (33). **B H**
 Carter, Prof. Truman Post, 872 Grove St., Jacksonville, Ill. (46). **F G**
 Cary, Albert A., 95 Liberty St., New York, N. Y. (36). **D**
 Cary, Mrs. Elizabeth M. L., 184 Delaware Ave., Buffalo, N. Y. (45). **E**
 Case, Eckstein, 9 Rockwell St., Cleveland, Ohio. (47).
 Chandler, Richard E., Stillwater, Oklahoma (46). **B D**
 Chaney, Prof. Lucian W., Jr., Carleton College, Northfield, Minn. (45).
 Chase, R. Stuart, 53 Summer St., Haverhill, Mass. (18). **F**
 Cheney, Mrs. Ednah Dow, Jamaica Plain, Mass. (47).
 Child, Clement D., Colgate Univ., Hamilton, N. Y. (44). **B**
 Chrystie, Wm. F., Hastings-on-Hudson, New York, N. Y. (36).
 Chittenden, Frank Hurlbut, Department of Agriculture, Washington,
 D. C. (48). **F**
 Clancy, Michael Albert, 1426 Corcoran St., Washington, D. C. (40). **H**

- Clark, Alex. S., Westfield, N. J. (33).
 Clark, Edward, 417 Fourth St., N. W., Washington, D. C. (40).
 Clark, John S., 646 Washington St., Boston, Mass. (31). **I B C**
 Clark, Joseph E., M.D., 396 Fourth St., Brooklyn, N. Y. (43). **A E**
 Clark, S. Wellman, M.D., 110 Mercer St., Jersey City, N. J. (44). **H**
 Clark, Thomas H., 22 Lancaster St., Worcester, Mass. (40).
 Clark, Wm. Brewster, M.D., 50 E. 31st St., New York, N. Y. (33).

F C

- Clarke, Miss Cora H., 91 Mt. Vernon St., Boston, Mass. (47). **F**
 Claypole, Dr. Agnes M., Wellesley, Mass. (46).
 Claypole, Miss Edith J., Wellesley, Mass. (46).
 Clough, Albert L., S.B., Box 14, Manchester, N. H. (45). **B**
 Cluett, J. W. Alfred, Troy, N. Y. (43).
 Coates, Prof. Charles E., Ph.D., University of Louisiana, Baton Rouge, La. (46). **C**
 COE, HENRY W., M.D., "The Marquam," Portland, Oregon. (32). **H F**
 Coit, J. Milner, Ph.D., Saint Paul's School, Concord, N. H. (33). **B C E**
 Colgate, Abner W., Morristown, N. J. (44).
 Colie, Edw. M., East Orange, N. J. (30). **E I**
 Collin, Rev. Henry P., Coldwater, Mich. (37). **H**
 Comstock, Prof. Charles Worthington, Golden, Col. (47). **D A**
 Comstock, Dr. T. Griswold, 3401 Washington Ave., St. Louis, Mo. (29).

• **F H**

- Conant, Miss E. Ida, 42 W. 48th St., New York, N. Y. (33). **H I F**
 Cook, Dr. Charles D., 162 Remsen St., Brooklyn, N. Y. (25).
 Cook, George Willis, Dublin, N. H. (47). **H I**
 Cook, Melville T., Greencastle, Ind. (45). **G**
 Cooley, Grace E., Ph.D., Wellesley College, Wellesley, Mass. (47). **G**
 Cope, Thos. P., Awbury, Germantown, Pa. (33). **I**
 Copeland, Edwin Bingham, Monroe, Wis. (45). **G**
 Corcoran, Dr. Luke, Maple St., Springfield, Mass. (44). **H**
 Cornman, Oliver P., 2252 N. 20th St., Philadelphia, Pa. (46). **H**
 Courtis, William Munroe, 449 Fourth Ave., Detroit, Mich. (46). **E C G**
 Cowell, Jno. F., Botanic Garden, West Seneca, N. Y. (35).
 Cowles, Miss Louisa F., Mt. Holyoke College, So. Hadley, Mass. (47). **E**
 Cox, Charles F., Pres. Council Scientific Alliance of New York, Grand Central Station, New York, N. Y. (43).
 Crafts, Robert H., 2329 S. 6th St., Minneapolis, Minn. (32). **I B**
 Craig, John, Ames, Iowa (41).
 Crane, Walter, Sup't Carnegie Free Library, Braddock, Pa. (47). **G**
 Crawford, John, Leon, Nicaragua, C. A. (40). **E H**
 Crawley, Edwin S., Ph.D., Springfield Ave., Chestnut Hill, Philadelphia, Pa. (45).
 Crook, Alja Robinson, Ph.D., 1914 Sheridan Road, Evanston, Ill. (47). **E**
 Crosby, Prof. W. O., Mass. Institute Technology, Back Bay, Boston, Mass. (47). **E**
 CROWELL, A. F., Woods Holl, Mass. (30). **C**

Cruikshank, James, LL.D., 206 S. Oxford St., Brooklyn, N. Y. (36).
 Cummings, Miss Clara E., Wellesley College, Wellesley, Mass. (47).

G

Cunningham, Francis A., 1613 Wallace St., Philadelphia, Pa. (33). **DEB**
 Cunningham, Prof. Susan J., Swarthmore College, Swarthmore, Pa (38).

A

Cuntz, Johannes H., 325 Hudson St., Hoboken, N. J. (36).
 Curtis, William E., Post Building, Washington, D. C. (40). **HI**
 Dabney, Charles W., University of Tennessee, Knoxville, Tenn. (47).
 Dall, Mrs. Caroline H., Washington, D. C. (46).
 Dana, Charles L., 50 W. 46th St., New York, N. Y. (46). **H**
 Davenport, Prof. Eugene, Dean of the College of Agriculture, University of Illinois, Champaign, Ill. (39).
 Davidson, R. J., Experiment Station, Blacksburg, Va. (40). **C**
 Davis, Abial B., A.M., 129 East Lincoln Ave., Mt. Vernon, N. Y. (44). **A**
 DAVIS ANDREW MCFARLAND, 10 Appleton St., Cambridge, Mass. (35). **H**
 Davis, Prof. Charles A., Alma, Mich. (46). **G**
 Davis, J. J., M.D., 1119 College Ave., Racine, Wis. (31) **FG**
 Davis, John Woodbridge, 523 West 173d St., New York, N. Y. (47). **A**
 Davison, John M., 60 Oxford St., Rochester, N. Y. (38). **C**
 Dean, Seth, Glenwood, Iowa. (34). **D**
 Deghué, Joseph A., 247 Harrison St., Brooklyn, N. Y. (40). **C**
 Delafield, Maturin L., Jr., Fieldston, Riverdale, New York, N. Y. (43). **G**
 Dewey, L. H., Dep't of Agriculture, Washington, D. C. (40). **FG**
 Dinsmore, Prof. Thos. H., Jr., Syracuse, N. Y. (29). **BC**
 Dixon, Roland B., Peabody Museum, Cambridge, Mass. (46). **H**
 Dodge, Martin, Cleveland, Ohio. (47). **D**
 Dodge, Philip T., Tribune Building, New York, N. Y. (44). **BD**
 Doty, P. A., 168 Broadway, Long Branch, N. J. (43). **D**
 Doughty, John W., 165 Johnston St., Newburgh, N. Y. (19). **E**
 Dow, H. H., Midland, Mich. (47). **C**
 Drescher, Willibald A. E., P. O. Drawer 1033, Rochester, N. Y. (41). **F**
 Drummond, Isaac Wyman, Ph.D., 436 W. 22nd St., New York, N. Y. (36).
 Du Bois, Howard Weidner, Central High School, Philadelphia, Pa. (47).
A
 Duffy, Rev. James S., 474 Sackett St., Brooklyn, N. Y. (43).
 Duggar, Benjamin Minge, Cornell University, Ithaca, N. Y. (45).
 Dunn, Louise Brisbin, Barnard College, Morningside Heights, New York, N. Y. (47). **G**
 Durand, Elias J., D.S., Cornell University, Ithaca, N. Y. (41). **G**
 Durfee, W. F., Westerleigh, West New Brighton, Staten Island, N. Y. (33). **DCBAEI**
 Durfee, Prof. William Pitt, Ph.D., Hobart College, Geneva, N. Y. (46). **A**
 Durkee, Esther M., M.D., 1139 Third Ave., Detroit, Mich. (46).
 Dutton, Charles Frederic, Jr., A.B., 349 Franklin Ave., Cleveland, Ohio (47).

- Dwight, Dr. Thomas, Prof. of Anatomy, Harvard Medical School, Boston, Mass. (47). **H**
- Eaton, Rev. Charles A., Toronto, Ontario, Can. (47).
- Edelheim, Carl, 253-259 N. Broad St., Philadelphia, Pa. (33).
- Edgar, Clinton G., 72 Jefferson Ave., Detroit, Mich. (46).
- Ekeley, Prof. John B., The Cathedral School of Saint Paul, Garden City, L. I., N. Y. (42). **C**
- Ellis, Frederick W., M.D., Monson, Mass. (47). **B H**
- Emery, Albert Hamilton, Jr., 312 Main St., Stamford, Conn. (47) **D**
- ESTES, DANA, Brookline, Mass. (29). **I H**
- Evans, Alexander W., M.D., 12 High St., New Haven, Conn. (45) **G**
- Evans, Henry Brown, Flower Observ., Upper Darby, Pa. (48). **A**
- Evans, Samuel G., 211 Main St., Evansville, Ind. (39). **F**
- Fairbanks, Miss Charlotte, Ph.D., Wellesley College, Wellesley, Mass. (47). **C**
- Fairchild, B. T., P. O. Box 1120, New York, N. Y. (36).
- Falconer, William, Schenley Park, Pittsburg, Pa. (29).
- Farwell, Oliver A., 1225 Jefferson Ave., Detroit, Mich. (46). **G**
- Farwell, Robert Benneson, C. E., 53 Monument Ave., Charlestown, Mass. (47). **D**
- Fassig, Oliver Lanard, Johns Hopkins University, Baltimore, Md. (46). **B**
- Fellows, Charles S., No. 1 High St., Bangor, Me. (34). **F**
- Felt, Charles Wilson, Marlboro, Mass. (47) **I**
- Felt, Dr. Ephraim Porter, State Entomologist, Albany, N. Y. (44). **F**
- Fessenden, Prof. Reginald A., Western University of Penn., Allegheny, Pa. (47). **A**
- Field, George Wilton, 233 Medway St., Providence, R. I. (47).
- Field, W. L. W., Milton, Mass. (47). **F**
- Fielding, Frank E., Virginia City, Storey Co., Nev. (46).
- Fink, Prof. Bruce, Upper Iowa University, Fayette, Iowa (45). **E F**
- Fireman, Peter, Ph.D., Columbian University, Washington, D. C. (45).
- Fischer, Louis Albert, U. S. C. and G. Survey, Washington, D. C. (47).
A B C
- Flanders, Charles S., Franklin, Mass. (42). **E**
- Fleming, Miss Mary A., 13 W. Chippewa St., Buffalo, N. Y. (47). **E G**
- Flint, Albert Freer, 8 Congress St., Boston, Mass. (47).
- Floody, Rev. Robert John, Sc.M., S.T.B., South Ashburnham, Mass. (44). **H**
- Flynn, Henry Franklin, C. and G. Survey Office, Washington, D. C. (47). **A**
- Flynn, Oscar R., Columbus, Ohio (46). **C**
- Foley, Prof. Arthur Lee, Indiana University, Bloomington, Ind. (46). **B**
- Folkmar, Daniel, Hotel de Flandre, 91 Boulevard Saint Germaine 91, Paris, France (46). **H**
- Fowler, Edwin H., U. S. C. and G. Survey, Washington, D. C. (47).
- Francis, Jno. Miller, Director Chemical Dep't, Parke, Davis & Co., 784 Congress St. E., Detroit, Mich. (46). **C**
- Franklin, Mrs. C. Ladd, 1507 Park Ave., Baltimore, Md. (47). **H**

- Franklin, Edward Curtis, Ph.D., Kansas State University, Lawrence, Kan. (47). **B G**
- Freeman, Prof. T. J. A., Boston College, 761 Harrison Ave., Boston, Mass. (33). **B C**
- French, Wm. H., Oak Park, Ill. (47). **I**
- Fretz, Dr. John Edgar, Doylestown, Bucks Co., Pa. (46). **F G H**
- Frick, Prof. John H., Central Wesleyan Coll., Warrenton, Mo. (27)
E F B A
- Frisbie, J. F., M.D., Box 455, Newton, Mass. (29). **E H**
- Frost, Miss Lucy Ames, 35 Robinson St., Dorchester, Mass. (47). **B**
- FROTHINGHAM, MRS. LOIS R., Milton, Mass. (31). **F A I**
- Fuller, Chas. G., M.D., 38 Central Music Hall, Chicago, Ill. (35). **F**
- Fuller, Melville W., LL.D., Chief Justice, U. S., 1800 Massachusetts Ave., Washington, D. C. (40).
- Furbish, Miss Kate, 13 Lincoln St., Brunswick, Me. (44). **G**
- Furness, Miss Caroline E., Vassar College Observatory, Poughkeepsie, N. Y. (47). **A**
- Gable, George D., Ph.D., Parsons College, Fairfield, Iowa (40). **A B**
- Galloway, Prof. Thomas Walton, Missouri Valley College, Marshall, Mo. (45) **F G**
- Gardiner, Rev. Frederic, Jr., Pomfret, Conn. (47). **F H**
- Gardner, Rev. Corliss B., Ripley, N. Y. (29). **A B I**
- GARLAND, JAMES, 2 Wall St., New York, N. Y. (36).
- Garnier, Madame Laure Russell, 528 W. 123d St., New York, N. Y. (40).
- Gault, Franklin B., 602 No. 1 St., Tacoma, Wash. (43).
- Gay, Miss E. Jane, 214 1st St., S. E., Washington, D. C. (44). **H**
- GENTH, FRED. A., Lansdowne, Del. Co., Pa. (32). **C E**
- Getman, Frederick H., 196 Atlantic St., Stamford, Conn. (45). **B**
- Giddings, Prof. Franklin H., Columbia University, New York, N. Y. (46). **H I**
- GLENNY, WILLIAM H., Buffalo, N. Y. (25).
- Glover, James Waterman, Ph.D., 44 Kingsley St., Ann Arbor, Mich. (46).
A
- Goldthwaite, Miss Nellie Esther, Mount Holyoke College, So. Hadley, Mass. (47). **C**
- Goodman, Miss Marie L., Westport, Mo. (46).
- Goodnow, Henry R., 95 Riverside Drive, New York, N. Y. (32). **B**
- Goodwin, Prof. Harry M., Mass. Institute Technology, Back Bay, Boston, Mass. (47). **B**
- Goulding, Henry Jay, 917 Mary St., Ann Arbor, Mich. (47). **A B**
- Grabau, Amadeus W., S.B., Mass. Inst. Technology, Back Bay, Boston, Mass. (45).
- Graef, Edw. L., 58 Court St., Brooklyn, N. Y. (28). **F**
- Green, Edgar Moore, M.D., Easton, Pa. (36). **C G H**
- Green, Milbrey, M.D., 567 Columbus Ave., Boston, Mass. (29).
- Greene, Prof. Edward Lee, Catholic University of America, Washington, D. C. (42). **G**

- Greene, G. K., 195 W. 1st St., New Albany, Ind. (38).
 Greene, Miss Isabella M., 213 N. Union St., Akron, Ohio (47).
 Greene, J. Evarts, 98 Lincoln St., Worcester, Mass. (47). **I**
 Greene, Jacob L., President Mut. Life Insurance Co., Hartford, Conn. (23).
 Greene, Jeannette B., M.D., Sci.D., F.E.C., 56 W. 55th St., New York, N. Y. (33). **F E C**
 Greenleaf, John T., Owego, N. Y. (33). **F**
 Greenleaf, Robert Willard, M.D., A.M., 561 Boylston St., Boston, Mass. (47).
 Greenman, Jesse More, A.B., Ass't Harvard Botanical Gardens, 22 Perkins Hall, Cambridge, Mass. (47). **G**
 Griffith, Miss Mary Dechert, 3914 Walnut St., Philadelphia, Pa. (47). **B C**
 Grout, Abel J., Plymouth, N. H. (47). **G**
 Grower, George G., Ansonia, Conn. (43). **B D**
 Gulliver, F. P., St. Marks School, Southboro, Mass. (40). **E**
 Haffner, Miss Netta W., Sturgis, Mich. (46). **C**
 Hagar, Stansbury, 31 Nassau St., New York, N. Y. (43).
 Haight, Stephen S., C.E., 1266 Clover St., West Farms, New York, N. Y. (31). **D**
 Hale, George D., 409 Lake Ave., Rochester, N. Y. (41).
 Hall, James P., 6 Poplar St., Brooklyn, N. Y. (40). **A B**
 Hammond, Mrs. Eliza F., 645 Jefferson Ave., Detroit, Mich. (46).
 Hammond, George W., Hotel Hamilton, 260 Clarendon St., Boston, Mass. (47).
 Harmon, Miss A. Maria, 171 Maclaren St., Ottawa, Ontario, Can. (31). **H F**
 Harper, Prof. Charles A., Columbia University, Havemeyer Hall, New York, N. Y. (40). **C**
 Harper, Henry Winston, M.D., Univ. of Texas, Austin, Texas (45). **C**
 Harris, Miss Emma G., Woonsocket, R. I. (44). **H F E**
 Harris, Rollin Arthur, U. S. C. and G. Survey, Washington, D. C. (47). **A B**
 Hart, C. Porter, M.D., Wyoming, Hamilton Co., Ohio (30). **F**
 Hart, Rev. Prof. Samuel, Trinity College, Hartford, Conn. (22). **A**
 Hartz, J. D. Aug., College Point, N. Y. (43).
 Harvey, Wm. Stocker, 119 So 4th St., Philadelphia, Pa. (47).
 Haynes, Prof. Arthur E., Univ. of Minnesota, Minneapolis, Minn. (45).
 Haynes, Miss Julia Anna, Emma Willard School, Troy, N. Y. (47). **F G**
 Hays, Prof. Willet M., St. Anthony Park, Minn. (45).
 Haywood, Prof. John, Otterbein University, Westerville, Ohio. (30). **A B**
 Head, W. R., 5467 Jefferson Ave., Hyde Park, Chicago, Ill. (38). **F**
 Hedge, Fred H., Public Library, Lawrence, Mass. (28). **F H**
 Hendricks, Henry H., 49 Cliff St., New York, N. Y. (30).
 Henry, Chas. C., M.D., 56 Clark St., Brooklyn, N. Y. (43).
 Hertzberg, Prof. Constantin, 181 S. Oxford St., Brooklyn, N. Y. (29). **B F**
 HEXAMER, C. JOHN, C.E., 419 Walnut St., Philadelphia, Pa. (33). **C B**

- Heyer, Wm. D., 523 South Broad St., Elizabeth, N. J. (33). **B D**
- Higley, Warren, 71 Broadway, New York, N. Y. (43).
- Hill, Geo. A., Naval Observatory, Washington, D. C. (47). **A**
- Hinton, John H., M.D., 41 W. 32nd St., New York, N. Y. (29). **F H**
- Hitchcock, Miss Fanny R. M., 4038 Walnut St., Philadelphia, Pa. (35). **F**
- Hoadley, Geo. A., A.M., Swarthmore College, Swarthmore, Pa. (40).
- Hobbs, Prof. Perry L., Western Reserve Medical College, Cleveland, Ohio (41). **C**
- Hodges, Julia, 139 W. 41st St., New York, N. Y. (36). **E F H**
- HOE, MRS. R., JR., 11 E. 36th St., New York, N. Y. (36).
- Hoe, Mrs. Richard M., 11 E. 71st St., New York, N. Y. (36).
- Hoffman, Very Rev. Eugene Aug., D.D., Dean of General Theological Seminary, 426 W. 23rd St., New York, N. Y. (36).
- Hogeboom, Miss Ellen C., Shelbyville, Ky. (46). **C**
- Holden, E. F., 530 W. Onondaga St., Syracuse, N. Y. (43). **A**
- Holden, L. E., The Hollenden, Cleveland, Ohio (32).
- HOLDEN, MRS. L. E., The Hollenden, Cleveland, Ohio (35).
- Hollinshead, Warren H., Vanderbilt Univ., Nashville, Tenn. (37).
- Holmes, Dr. C. R., Cincinnati, Ohio (48).
- Holmes, W. Newton, Pritchett School Institute, Glasgow, Mo. (36).
- Holt, Henry, 29 W. 23rd St., New York, N. Y. (29).
- Holton, Henry D., Brattleboro, Vt. (44). **I**
- Homer, Chas. S., of Valentine & Co., 245 Broadway, New York, N. Y. (29).
- Hood, William, 512 Van Ness Ave., San Francisco, Cal. (35). **D**
- Hooker, Prof. Henrietta E., Mt. Holyoke College, South Hadley, Mass. (45). **G**
- Hopkins, Dr. A. D., Experiment Station, Morgantown, W. Va. (42). **F**
- Hopkins, Prof. A. J., Amherst College, Amherst, Mass. (44). **C**
- Hopkins, George I., Manchester, N. H. (47). **A B**
- Hoskins, William, La Grange, Cook Co., Ill. (34). **C**
- Hudson, George H., Plattsburgh, Clinton Co., N. Y. (31). **F**
- Hume, Alfred, C. E., University, Miss. (39). **A**
- Humphrey, Daniel, M.D., Lawrence, Mass. (18). **F H**
- Hungerford, W. S., care W. Ames & Co., Jersey City, N. J. (43). **D**
- Hunt, Miss Sarah E., Salem, Mass. (20).
- Hunter, Prof. Joseph Rufus, Richmond College, Richmond, Va. (45). **C**
- Huntington, Edward Vermilye, Williams College, Williamstown, Mass. (47). **A**
- Hurd, E. O., Plainville, Hamilton Co., Ohio. (30). **E F**
- Hutchinson, Wm. M., M.D., 207 Clinton St., Brooklyn, N. Y. (40). **C B**
- Hyams, Isabel F., 26 Wales St., Roxbury, Mass. (47). **C**
- Hyde, B. T. B., 20 W. 53d St., New York, N. Y. (43). **D**
- Hyde, Charles Gilman, Room 140, State House, Boston, Mass. (47). **D**
- Hyde, E. Francis, 835 Fifth Ave., New York, N. Y. (43). **A**
- Hyde, Frederick, E., M.D., 20 W. 53d St., New York, N. Y. (43). **E**
- Hyde, Frederick E., Jr., 20 W. 53d St., New York, N. Y. (43). **H**

- Ingham, Wm. A., 320 Walnut St., Philadelphia, Pa. (33). **E**
 Jaffa, Myer Edward, Berkeley, Cal. (47).
 James, Bushrod W., M.D., N. E. cor. 18th and Green Sts., Philadelphia, Pa. (29). **F**
 James, Charles C., M.A., Dep't of Agriculture, Toronto, Ontario, Can. (46). **I**
 Jaques, William H., Little Boars Head, N. H. (47). **D**
 Jefferis, Wm. W., 442 Central Park, West, New York, N. Y. (33). **E**
 Jeffries William A., 126 Beacon St., Boston, Mass. (47). **F**
 Jenks, Wm. H., Brookville, Pa. (38).
 Jewett, Prof. Frank Fanning, Oberlin College, Oberlin, Ohio. (47). **C**
 Johnson, Miss Isabel L., 467 Mass. Ave., Boston, Mass. (47). **E**
 Johnson, Nels, Manistee, Mich. (41). **A B**
 Johnson, William Stone, Room 140, State House, Boston, Mass. (47).
D
 Johnson, Prof. Willis G., College Park, Md. (47).
 Jones, Prof. Frederick S., Univ. of Minnesota, Minneapolis, Minn. (45).
 Jordan, Whitman H., Director N. Y. Agricultural Experiment Station, Geneva, N. Y. 45.
 Josephs, Lyman C., Box 311, Newport, R. I. (47).
 Kearney, Thos. H., Jr., Dep't Agric., Washington, D. C. (47). **G**
 Kedzie, John H., Evanston, Ill. (34). **B**
 Keeler, Prof. James E., Director of the Lick Observ., Mt. Hamilton, via San José, Cal. (47). **A**
 Keith, Prof. Marcia A., Mount Holyoke College, South Hadley, Mass. (46). **B**
 Kelley, John Harris, 321 N. Vine St., Nashville, Tenn. (44). **C**
 Kellogg, John H., M.D., Battle Creek, Mich. (24). **F**
 Kelsey, Rev. F. D., Sc.D., 2146 Fulton St., Toledo, Ohio. (46).
 Kelsey, Harlan Page, 1150 Tremont Building, Boston, Mass. (47). **G**
 Kennedy, Dr. George Golding, Roxbury, Mass. (40). **F**
 KENNEDY, HARRIS, 284 Warren St., Roxbury, Mass. (40). **E F**
 Kennedy, Patrick Beveridge, Ithaca, N. Y. (47). **G**
 Kimball, Albert B., M.E., Worcester High School, Worcester, Mass. (47). **B**
 Kinder, Miss Sarah A., 28 Lockerbie St., Indianapolis, Ind. (39). **H**
 King, A. F. A., M.D., 1315 Massachusetts Ave., N. W., Washington, D. C. (29). **F H**
 King Miss Ada M., 8 Briggs Place, Rochester, N. Y. (39). **E I**
 King, Geo. B., Lawrence, Mass. (47).
 King, Miss Harriet M., Salem, Mass. (28).
 Kingsbury, Benj. F., Ithaca, N. Y. (45). **F**
 Kinraid, Thomas Burton, 38 Spring Park Avenue, Jamaica Plain, Mass. (47).
 Kinsley, Carl, Washington University, St. Louis, Mo. (47). **B**
 Kittredge, Miss H. A., North Andover, Mass. (37). **F**
 Klie, G. H. Carl, M.D., 5100 N. Broadway, St. Louis, Mo. (39). **C F**

- Knapp, G. N., Prairie du Sac, Wis. (46). **G H**
- Kneeland, Stillman F., LL.D., 110 Berkeley Pl., Brooklyn, N. Y. (43). **I**
- Knipp, Charles Tobias, Indiana University, Bloomington, Ind. (46). **B**
- Kofoed, Charles Atwood, Univ. of Illinois, Urbana, Ill. (48). **F**
- Kraemer, Prof. Henry, 145 N. 10th St., Philadelphia, Pa. (47). **G**
- Krécsy, Prof. Béla, VI Bulyovszky u. 22, Budapest, Hungary. (41). **C**
- Kremers, Prof. Edward, University of Wisconsin, Madison, Wis. (47).
- Kroeber, A. L., Columbia University, New York, N. Y. (47).
- Kuhne, F. W., 19 Court St., Fort Wayne, Ind. (38). **A F**
- La Forge, Lawrence, Alfred University Observ., Alfred, N. Y. (43).
- Lampard, Henry, 102 Shuter St., Montreal, Can. (40). **C D E**
- Land, Charles H., 36 Adams Ave. W., Detroit, Mich. (46).
- LANDERO, CARLOS F. DE, Ass't Director, Pachuca and Real del Monte Mining Co., Pachuca, Mexico. (36). **C B**
- Lane, Horace Manley, M.D., Caixa 14, S. Paulo, Brazil, S. A. (46).
- Lang, Prof. Henry R., Yale University, New Haven, Conn. (41). **H**
- Langmann, Gustav, M.D., 121 W. 57th St., New York, N. Y. (36).
- Law, Benedict W., 693 Lafayette Ave., Brooklyn, N. Y. (45). **E**
- Lawrence, Harry E., Rochester University, Rochester, N. Y. (44). **B**
- Laws, Frank Arthur, Mass. Institute Technology, Back Bay, Boston, Mass. (47).
- Le Boutillier, Roberts, East Washington Avenue, Germantown, Philadelphia, Pa. (47). **G**
- Lee, Prof. Willis Thomas, M.S., Brooklyn, Susquehanna Co., Pa. (47). **E F**
- Leiter, L. Z., 81 South Clark St., Chicago, Ill. (40).
- Lemp, William J., cor. Cherokee and 2nd Carondelet Avenue, St. Louis, Mo. (27).
- Letson, Miss Jennie E., 19 E. Bennett St., Buffalo, N. Y. (47).
- LEWIS, CLARENCE MCKENZIE, 104 E. 37th St., New York, N. Y. (47).
D
- Lewis, Geo. S., Jr., Springfield, Mass. (44). **G**
- Lewis, Joseph Volney, Prof. of Geol. and Mineral., Clemson College, S. C. (45). **E C**
- Lewis, Walter H., Jr., 11 E. 35th St., New York, N. Y. (47).
- Lindenkohl, Henry, U. S. Coast and Geodetic Survey, Washington, D. C. (47).
- Lindsay, Alexander M., Rochester, N. Y. (41).
- Litch, Robert Lincoln, 115 N. Centre St., Bethlehem, Pa. (46). **B**
- Livermore, Mrs. M. A. C., 1569 Mass. Ave., Cambridge, Mass. (29). **F**
- Lloyd, Andrew J., Optician, 323 Washington St., Boston, Mass. (47).
B H
- Loewy, Benno, 206 and 208 Broadway, New York, N. Y. (41).
- Logan, Walter S., 27 William St., New York, N. Y. (36).
- Lomb, Adolph, P. O. Drawer 1033, Rochester, N. Y. (41).
- Lomb, Henry, P. O. Drawer, 1033, Rochester, N. Y. (41).
- Lomb, Henry C., P. O. Drawer 1033, Rochester, N. Y. (43).
- Lord, Benjamin, 34 W. 28th St., New York, N. Y. (36).

- Low, A. A., Columbia Heights, Brooklyn, N. Y. (43). **A**
 Lufkin, Albert, Newton, Iowa (31). **D E**
 Luggier, Dr. Otto, Entomologist, Minnesota State Agricultural Station, St. Anthony Park, Minn. (47). **F**
 Lull, Richard S., Amherst, Mass. (43). **F H**
 Lund, James, 142 Hawthorne St., Malden, Mass. (45).
 Lundin, Carl A. R., care Messrs. Alvan Clark and Sons, Cambridgeport, Mass. (47). **A**
 Luther, Miss Agnes Vinton, 29 Walnut St., Newark, N. J. (47). **E**
 LYMAN, BENJ. SMITH, 708 Locust St., Philadelphia, Pa. (15). **E**
 Lyman, Henry H., 74 McTavish St., Montreal, P. Q., Can. (29). **F E**
 McCartney, Dr. James H., Room 501, Granite Building, Rochester, N. Y. (41). **A B**
 McFadden, Prof. L. H., Westerville, Ohio. (32). **B C**
 McFarland, Robert W., LL.D., Oxford, Ohio (33). **A**
 McGee, Miss Emma R., Farley, Iowa (33). **H**
 McGiffert, James, 169 8th St., Troy, N. Y. (44). **A**
 McGinnis, W. H., 1020 Orange St., Youngstown, Ohio (48).
 McLaughlin, George Eyerman, M.D., 41 Crescent Ave., Jersey City, N. J. (47). **H**
 McLoughlin, T. S., New Orleans, La. (47).
 McMillan, Smith B., Signal, Columbiana Co., Ohio (37).
 McMillin, Emerson, 40 Wall St., New York, N. Y. (37).
 MacNutt, Barry, Lehigh University, So. Bethlehem, Pa. (47). **B**
 McPherson, Wm. D., Lock Box N, So. Framingham, Mass. (47).
 Macfarlane, Dr. John M., Lansdowne, Del. Co., Pa. (41). **F G**
 Magruder, Wm. T., Ohio State University, Columbus, Ohio (37).
 Mallinckrodt, Edw., P. O. Sub-station A, St. Louis, Mo. (29). **C**
 Mally, Charles William, Wooster, Ohio (46).
 Malone, Rev. Sylvester, 69 S. 3d St., Brooklyn, N. Y. (43).
 Maltby, Margaret E., Ph.D., 32 Eliot St., Jamaica Plain, Mass. (46).
 Mann, Albert, Ph.D., Ohio Wesleyan University, Delaware, Ohio (43).
F G
 Mann, Thomas Wm., 35 Hampden St., Holyoke, Mass. (44). **D**
 Manning, Charles H., U. S. N., Manchester, N. H. (35). **D**
 Manning, J. Woodward, 1150 Tremont Building, Boston, Mass. (47).
G
 Manning, Warren H., Brookline, Mass. (31). **F H E**
 Mapes, Charles Victor, 60 W. 40th St., New York, N. Y. (37). **C**
 MARBLE, MANTON, 532 Fifth Ave., New York, N. Y. (36).
 Marble, J. Russel, Worcester, Mass. (31). **C E**
 Marble, Miss Sarah, Woonsocket, R. I. (29). **C**
 Marple, Charles A., 743 Third Ave., Louisville, Ky. (39). **B**
 Marsden, Samuel, 1015 N. Leffenwell Ave., St. Louis, Mo. (27). **A D**
 Mateer, Horace N., M.D., Wooster, Wayne Co., Ohio (36). **F E**
 Mathews, Miss Mary Elizabeth, Lake Erie Seminary, Painesville, Ohio (41). **F**

- Matlack, Charles, "Hidden Hearth," Matunuck, R. I. (27). **I**
- Mattoon, A. M., Park College, Parkville, Mo. (47). **A**
- Mayer, Alfred Goldsborough, S.D., M.E., 11 Francis Ave., Cambridge, Mass. (47). **F**
- Maynard, Geo. C., 1407 15th St., Washington, D. C. (35). **B D**
- Maynard, Washburn, Lieut. Com'd U. S. N., Bureau of Ordnance, Navy Dep't, Washington, D. C. (33). **B**
- Means, James, 196 Beacon St., Boston, Mass. (47).
- Meehan, Mrs. Thos., Germantown, Pa. (29).
- Meek, Charles S., Terre Haute, Ind. (47).
- MERRILL, MRS. WINIFRED EDGERTON, Ph.D., 268 State St., Albany, N. Y. (35). **A**
- Merrow, Miss Harriet L., Kingston, R. I. (44).
- Merryweather, George N., cor. 6th and Race Sts., Cincinnati, O (30).
F H
- METCALF, ORLANDO, 424 Telephone Building, Pittsburg, Pa. (35). **D**
- Metzler, Wm. H. Ph.D., Syracuse University, Syracuse, N. Y. (45). **A**
- Milham, Willis I., Williams College, Williamstown, Mass. (47). **A B**
- MILLER, EDGAR G., 213 E. German St., Baltimore, Md. (29). **E F A**
- Miller, Prof. Frank E., Westerville, Ohio (44). **A**
- Miller, John A., 2500 Park Ave., Cairo, Ill. (22). **D**
- Miller, P. Schuyler, B.S., Stillwater, Saratoga Co., N. Y. (46). **C**
- Millis, John, Captain Eng. U. S. A., Willets Point, N. Y. (48). **A B D E**
- Minns, Miss S., 14 Louisburg Square, Boston, Mass. (32).
- Mixer, Fred K., 427 Delaware Ave., Buffalo, N. Y. (35). **E**
- Mohler, John F., Dickinson College, Carlisle, Pa. (44). **B**
- Moody, Lucius W., New Haven, Conn. (43). **H**
- Moody, Mrs. Mary B., M.D., Fair Haven Heights, New Haven, Conn. (25). **E F**
- Moore, Mrs. A. H., Sawyerville, P. Q., Can. (32). **H**
- Moore, Burton E., Lincoln, Neb. (41). **B**
- Morgan, Wm. F., Short Hills, N. J. (27).
- Moseley, Edwin L., A.M., High School, Sandusky, Ohio (34).
- Moulton, Prof. Chas. W., Poughkeepsie, N. Y. (44). **C**
- Mowry, Wm. A., 17 Riverside Square, Hyde Park, Mass. (29). **I**
- Moxom, Philip Stafford, D.D., Wingood Lodge, 83 Dartmouth Terrace, Springfield, Mass. (44). **H I**
- Muir, John, Martinez, Cal. (22).
- Mulliken, Samuel P., Mass. Inst. of Technology, Boston, Mass. (43).
- Munson, Prof. Welton M., Maine State College, Orono, Me. (41). **G F**
- Murphy, Edward, M.D., New Harmony, Ind. (39). **C**
- Murray, Charles R., 185 Monroe St., Chicago, Ill. (47). **D**
- Murray, Dan'l Alexander, Ph.D., Cornell University, Ithaca, N. Y. (47).
A
- Myer, Mrs. Isaac, 21 E. 60th St., New York, N. Y. (44).
- Myers, Prof. G. W., University of Illinois, Urbana, Ill. (46). **A**
- Myres, John L., M.A., F.S.A., Christ Church, Oxford, Eng. (46). **H**

Nash, Geo. V., Norwood Heights, Williamsbridge, New York, N. Y. (47).

Neff, Peter, Jr., Consulting Engineer and Superintendent, Room 3, 87 Public Square, Cleveland, Ohio (34). **B**

Nelson, Daniel Thurber, M.D., 2400 Indiana Ave., Chicago, Ill. (47).

B E H I

Nelson, Wm., Rooms 7 and 8, Paterson Nat'l Bank, Paterson, N. J. (42).

Nelson, Wolfred, C.M., M.D., F.R.G.S., Astor House, New York, N. Y. (35). **H E**

Nesmith, Henry E., Jr., 28 South St., New York, N. Y. (30). **B F C**

Nichols, Austin P., 4 Highland Ave., Haverhill, Mass. (37).

Niles, Robert Lossing, 66 Broadway, New York, N. Y. (47). **B C D**

Norton, Charles Ladd, Mass. Institute Technology, Back Bay, Boston, Mass. (46). **B**

Norton, J. B. S., Missouri Botanical Garden, St. Louis, Mo. (47). **G**

Nunn, R. J., M.D., 119 York St., Savannah, Ga. (33). **B H**

O'Neill, Wm. Lane (43). **I**

Orleman, Col. Louis H., Ph.D., Principal Peekskill Military Acad., Peekskill, N. Y. (47).

Orser, Levi, 49 Sharon St., Boston, Mass. (47). **B**

Orth, Sam'l P., 223 So. Union St., Akron, Ohio (47). **H E**

Osgood, Joseph B. F., Salem, Mass. (31).

Ostrander, Mrs. Sarah E., 910 Lafayette Ave., Brooklyn, N. Y. (43).

O'Sullivan, Rev. Denis T., S.J., Woodstock College, Woodstock, Md. (40). **B A**

Owen, Prof. D. A., Franklin, Ind. (34). **E**

Owen, Miss Luella Agnes, 306 N. Ninth St., St Josephs, Mo. (47). **E**

Packard, Homer H., Detroit, Mich. (46). **C**

PAGE, DR. DUDLEY L., 46 Merrimack St., Lowell, Mass. (33). **F**

PAGE, MRS. NELLIE K., 46 Merrimack St., Lowell, Mass. (33). **F**

Palmer, Prof. Albert De Forest, Brown University, Providence, R. I. (47). **B**

Palmer, Dr. Edward, care F. V. Coville, Botanical Division, Dep't of Agriculture, Washington, D. C. (22). **H**

Palmer, Hon. Thomas W., Detroit, Mich. (46).

Palmer, Walter Keifer, 1301 New Hampshire St., Lawrence, Kan. (47).

D B

Park, Dr. Roswell, President Buffalo Soc. Nat. Hist., 510 Delaware Ave., Buffalo, N. Y. (45). **H**

Parker, Herschel C., 21 Fort Greene Place, Brooklyn, N. Y. (43).

Parker, Moses Greely, M.D., Lowell, Mass. (47). **H**

Parmelee, H. P., Charlevoix, Mich. (42). **H E**

Parsons, C. Chauncy, 43 Sedgwick St., Brooklyn, N. Y. (47). **C B**

PARSONS, JNO. E., 111 Broadway, New York, N. Y. (36).

Patterson, Mrs. Flora Wambaugh, Ass't Pathologist, Department of Agriculture, Washington, D. C. (44). **G**

Patterson, Prof. James L., Chestnut Hill, Philadelphia, Pa. (45).

- Patton, Horace B., Golden, Colo. (37). **E**
- Paulmier, Frederick Clark, Madison, N. J. (47). **F**
- Pease, Miss Clara A., 277 Central St., Springfield, Mass. (47). **E**
- Peck, Mrs. John H., 3 Irving Place, Troy, N. Y. (28).
- Peck, W. A., C.E., care of C. R. Dudley, 1405 Lawrence St., Denver, Colo. (19). **E**
- Peckham, Wheeler H., Drexel Building, Wall St., New York, N. Y. (36).
- Pedrick, Miss Catherine F., Lawrence, Mass. (43).
- Peirce, Cyrus N., D.D.S., 1415 Walnut St., Philadelphia, Pa. (31). **F**
- Peirce, Harold, 331 Walnut St., Philadelphia, Pa. (33). **H I**
- Pendleton, Edward Waldo, 21 Moffatt Block, Detroit, Mich. (46). **I H**
- Pennington, Miss Mary Engle, 3908 Walnut St., Philadelphia, Pa. (47).
C F G
- Pepper, George H., Amer. Mus. Nat. History, Central Park, New York, N. Y. (48). **H**
- PERKINS, ARTHUR, 14 State St., Hartford, Conn. (31). **B A**
- Perkins, Prof. Charles Albert, University of Tennessee, Knoxville, Tenn. (47). **B D**
- Perrine, Miss Lura L., State Normal School, Valley City, No. Dak. (47). **E H G F**
- Peters, Prof. Clayton A., Edinboro, Pa. (46). **G**
- Pettee, Prof. Charles Holmes, Durham, N. H. (47). **A**
- Pettee, Rev. J. T., Meriden, Conn. (39).
- Pettegrew, David Lyman, P. O. Box 75, Worcester, Mass. (44). **A**
- Phillips, John S., Editor McClure's Magazine, 141 E. 25th St., New York, N. Y. (46).
- Pickett, William Douglas, Four Bear, Big Horn Co., Wyo. (41). **D I**
- PIERREPONT, HENRY E., 216 Columbia Heights, Brooklyn, N. Y. (43).
- Pieters, Adrian J., U. S. Dep't Agriculture, Washington, D. C. (46). **G**
- Pilling, J. W., 1301 Massachusetts Ave., Washington, D. C. (40).
- Pinchot, Gifford, U. S. Department of Agriculture, Washington, D. C. (47). **G**
- Pinney, Mrs. Augusta Robinson, 350 Central St., Springfield, Mass. (44).
F G
- Plimpton, Geo. Arthur, 70 5th Ave., New York, N. Y. (47).
- Pollard, Charles Louis, 1854 5th St., N. W., Washington, D. C. (44). **G**
- Pomeroy, Charles Taylor, 55 Broad St., Newark, N. J. (43).
- Porteous, John, 48 St. Stephen St., Boston, Mass. (22).
- Porter, Miss Edna, 77 Bryant St., Buffalo, N. Y. (41). **F G**
- Poteat, Prof. Wm. L., Wake Forest, N. C. (47) **F**
- Potter, Rev. Henry C., 804 Broadway, New York, N. Y. (29)
- Powell, Thomas, M. D., 603 So. Main St., Los Angeles, Cal. (41).
- Prang, Louis, 45 Centre St., Roxbury, Mass. (29). **D**
- Pritchard, Prof. Samuel Reynolds, Blacksburg, Va. (47). **D**
- Proctor, Miss Edna Dean, Framingham, Mass. (44). **H**
- Proudfit, Alexander Couper, 34 School St., Boston, Mass. (47).
- PRUYN, JOHN V. L., JR., Albany, N. Y. (29).

- Pulsifer, Mrs. C. L. B., Newton Centre, Mass. (33).
 Purington, Miss Florence, Mount Holyoke College, South Hadley, Mass. (46). **A**
 Putnam, Chas. P., M.D., 63 Malborough St., Boston, Mass. (28).
 Putnam, Miss Elizabeth D., 2013 Brady St., Davenport, Iowa. (45).
 Putnam, Henry St. Clair, Davenport, Iowa. (47).
 Quick, Walter S. (46). **C**
 Ramaley, Francis, University of Colorado, Boulder, Colo. (45). **G**
 Rand, C. F., M.D., 1228 15th St., N. W., Washington, D. C. (27). **E H**
 Rand, Theodore D., Radnor, Delaware Co., Pa. (47).
 Randolph, Prof. L. S., Blacksburg, Va. (33). **D**
 Rane, Frank Wm., New Hampshire College, Agricultural Experiment Station, Durham, N. H. (42).
 Ransom, Chauncey Monroe, 73 Federal St., Boston, Mass. (47). **I**
 Rèche, Miss Eugénie M., 31 Howell St., Rochester, N. Y. (41). **E H**
 Redfield, William C., 107 Macon St., Brooklyn, N. Y. (44). **D**
 Reed, Charles J., 3313 N. 16th St., Philadelphia, Pa. (34). **C B**
 Reed, John O., 34 E. Kingsley St., Ann Arbor, Mich. (44).
 Renninger, John S., M.D., Marshall, Minn. (31). **C F**
 Reynolds, George, P. O. Box B, Salt Lake City, Utah. (44). **H**
 Rhoads, Edward, 152 School Lane, Germantown, Philadelphia, Pa. (47). **B**
 Rice, Edward L., A.B., Ohio Wesleyan University, Delaware, Ohio. (43).
 Rich, Jacob Monroe, 50 W. 38th St., New York, N. Y. (33). **B A**
 Rich, Michael P., 50 W. 38th St., New York, N. Y. (40).
 Richards, Prof. Theodore William, Harvard University, Cambridge, Mass. (47).
 Richardson, Prof. Chas. Henry, Ph.D., Hanover, N. H. (47). **E**
 Ricketts, Col. R. Bruce, Wilkesbarre, Pa. (33). **E**
 Rideout, Bates S., Norway, Me. (31). **E H**
 Ries, Elias E., E.E., 346 Broadway, New York, N. Y. (33). **B I D**
 Riggs, Chauncey Wales, 41 & 43 University Place, New York, N. Y. (41). **H**
 Riggs, Geo. W., Summit, N. J. (26). **C**
 Ritchie, John, Jr., Box 2725, Boston, Mass. (46). **A F**
 Rittenhouse, Charles T., 253 Broadway, New York, N. Y. (46). **B D**
 RIVERA, JOSÉ DE (29).
 Roberts, Miss Jennie B., Sandy Hook, Conn. (43).
 ROBERTSON, THOMAS D., Rockford, Ill. (10). **E H**
 Robinson, Prof. Otis Hall, 273 Alexander St., Rochester, N. Y. (23). **B A**
 Rochester, DeLancey, M.D., 469 Franklin St., Buffalo, N. Y. (35). **F**
 Rockwood, Charles G., Drawer A, Newark, N. J. (36).
 Rockwood, George I., 62 Summer St., Worcester, Mass. (47). **D**
 Roessler, Franz, 73 Pine St., New York, N. Y. (39).
 Rolfs, P. H., Florida Agricultural College, Lake City, Fla. (41). **G**
 ROOSEVELT, MRS. MARION T., 57 Fifth Ave., New York, N. Y. (31). **H I**
 Rorer, Jonathan T., Jr., 1919 Gratz St., Philadelphia, Pa. (47).

- Ross, Denman Waldo, Ph.D., Cambridge, Mass. (29).
 Roth, Filibert, Cornell University, Ithaca, N. Y. (39). **F**
 Rothe, Wm. G., 226 Stuyvesant Ave., Brooklyn, N. Y. (43).
 Rotzell, W. E., M.D., Narberth, Montgomery, Co., Pa. (45). **F H**
 Ruland, M. A., 292 Green Ave., Brooklyn, N. Y. (43).
 Rupp, August, A.B., College of City of New York, New York, N. Y. (35).
 Russell, A. H., Captain of Ordnance, U. S. A., care of Chief of Ordnance,
 U. S. A., Washington, D. C. (38). **D**
 Russell, Dr. Frederick William, Winchendon, Mass. (47).
 Russell, John Andrew, A.M., 401 Chamber of Commerce, Detroit, Mich.
 (46).
 Russell, Hon. John Edwards, Leicester, Mass. (47). **I**
 Rutter, Frank Roy, Ph.D., U. S. Geological Survey, Washington, D. C.
 (47). **I**
 Sabine, Wallace Clement, 40 Shepard St., Cambridge, Mass. (47). **B**
 Sackett, Miss Eliza D., Cranford, N. J. (35). **F H**
 Sage, John H., Portland, Conn. (23). **F**
 Sander, Dr. Enno, St. Louis, Mo. (27). **C**
 Sargent, Dudley Allen, M.D., Director of the Hemenway Gymnasium,
 Harvard University, Cambridge, Mass. (47). **H**
 Sargent, Herbert E., Museum of Art, Detroit, Mich. (46). **F**
 Sayre, Robert H., South Bethlehem, Pa. (28). **D**
 Schaeffer, Henri N. F., P. O. Box 676, Manchester, N. H. (46). **C**
 SCHAFFER, CHAS., M.D., 1309 Arch St., Philadelphia, Pa. (29). **F E**
 SCHAFFER, MRS. MARY TOWNSEND SHARPLESS, 1309 Arch St., Philadel-
 phia, Pa. (38). **F E**
 Schaffner, John H., Ohio State Univ., Columbus, Ohio (48). **G**
 Scharar, Christian H., 2073 N. Main Ave., Scranton, Pa. (33). **A D E H**
 SCHERMERHORN, F. AUG., 61 University Place, New York, N. Y. (36).
 SCHERMERHORN, WM. C., 49 W. 23d St., New York, N. Y. (36).
 Schieren, Hon. Charles A., Brooklyn, N. Y. (43). **I C**
 Schlotterbeck, Julius O., Ann Arbor, Mich. (46). **G**
 Schmid, Dr. H. Ernest, White Plains, N. Y. (25).
 Schobinger, John J., 2101 Indiana Ave., Chicago, Ill. (34). **B**
 Schöney, Dr. L., 1670 Lexington Ave., New York, N. Y. (29). **F**
 Schuette, J. H., Green Bay, Wis. (34). **F E B**
 Scott, Arthur Curtis, Kingston, R. I. (47).
 Scott, Prof. Arthur William, St. David's College, Lampeter, S. Wales,
 Eng. (46). **A B**
 Scott, Martin P., M.D., College Park, Md. (31).
 Scoville, S. S., M.D., Lebanon, Ohio (30). **E F**
 Searing, Anna H., M.D., Escondido, San Diego Co., Cal. (41). **G**
 Sears, Frederick Edmund, St Paul's School, Concord, N. H. (47). **C E**
 Sebert, William F., 353 Clinton St., Brooklyn, N. Y. (41). **A E**
 Selby, Augustine Dawson, Ohio Agricultural Experiment Station, Woos-
 ter, Ohio (44). **G**
 Serrell, Lemuel W., 140 Nassau St., New York, N. Y. (36). **D**

- Seymour, A. T., Dobbs Ferry, N. Y. (47).
 Sharples, Philip Price, A.B., 22 Concord Ave., Cambridge, Mass. (47). **C**
 Shattuck, George Burbank, Johns Hopkins University, Baltimore, Md. (49). **E**
 Shaw, Walter R., Ph.D., Barnard College, W. 119th St. and Boulevard, New York, N. Y. (47).
 SHEAFER, A. W., Pottsville, Pa. (28).
 Sheldon, Mrs. J. M. Arms, 18 W. Cedar St., Boston, Mass. (44). **F**
 Shepherd, Miss Elizabeth, 253 W. 128th St., New York, N. Y. (39).
 Shultz, Charles S., Hoboken, N. J. (31). **F**
 Siemon, Rudolph, 191 Calhoun St., Fort Wayne, Ind. (40). **A F**
 SILVER, L. B., 172 Summit St., Cleveland, Ohio (37).
 Skiff, F. J. V., Director, Field Columbian Museum, Chicago, Ill. (43).
 Skinner, Dr. Henry, 716 N. 20th St., Philadelphia, Pa. (47).
 Slade, Elisha Somerset, Bristol Co., Mass. (29). **F**
 Slocum, Chas. E., Ph.D., M.D., Defiance, Ohio (34). **F G H**
 Slocum, Frederick, Ladd Observatory, Providence, R. I. (47).
 Small, John Kunkel, Columbia University, New York, N. Y. (44).
 Smillie, Thomas W., U. S. National Museum, Washington, D. C. (40).
F
 Smith, Prof. A. W., Case School of Applied Science, Cleveland, Ohio (47).
 Smith, Allen J., M.D., School of Medicine, University of Texas, Galveston, Tex. (47). **H**
 Smith, Arthur Whitmore, Middletown, Conn. (44). **B**
 Smith, Benj. G., 45 Fayerweather St., Cambridge, Mass. (29). **I**
 Smith, Prof. Herbert S. S., Princeton University, Princeton, N. J. (29).
D
 Smith, Miss J. Angelina, State Normal School, Framingham, Mass. (45).
E
 Smith, James Hervey, Baldwin University, Berea, Ohio (40).
 Smith, Miss Jane, Peabody Museum, Cambridge, Mass. (29). **H**
 Smith, Jared G., Dept. of Agriculture, Washington, D. C. (47).
 Smith, Jos. R., Col. and Ass't Surgeon-Gen. U. S. A., 2300 De Laney Place, Philadelphia, Pa. (43).
 Smith, Philip Sidney, 90 Elm Hill Ave., Roxbury, Mass. (47). **E**
 Smith, Prof. Sarah Effie, Mt. Holyoke College, S. Hadley, Mass. (46).
A
 Smith, Prof. Thomas A., Beloit, Wis. (33). **B A**
 SMITH, USELMA C., 1515 Green St., Philadelphia, Pa. (33). **F**
 Smith, William Lincoln, Mass. Institute Technology, Back Bay, Boston, Mass. (47).
 Snyder, Miss Lillian, Lafayette, Ind. 47. (G)
 Solotaroff, H., M.D., 251 East Broadway, New York, N. Y. (47). **H**
 Soper, George A., 251 W. 93d St., New York, N. Y. (46). **C**
 Soule, Wm., Ph.D., Alliance, Ohio (33). **B C E**
 Souvielle, Mathieu, M.D., Box 355, Jacksonville, Fla. (36). **B E F**

- Souvielle, Mrs. Mathieu, Box 355, Jacksonville, Fla. (24). **A B F**
 Spalding, Fred. P., 159 E. Seneca St., Ithaca, N. Y. (46). **D**
 Spiegelhalter, Dr. Joseph, 2166 Lafayette Ave., St. Louis, Mo. (47). **E**
 Spofford, Paul N., P. O. Box 1667, New York, N. Y. (36).
 SPRAGUE, C. H., Malden, Mass. (29).
 Squibb, Charles F., A.B., 150 Columbia Heights, Brooklyn, N. Y. (43).
 Squibb, Edward Hamilton, M.D., 148 Columbia Heights, Brooklyn, N. Y.
 Stahley, George D., A.M., M.D., Gettysburg, Pa. (47). **F G**
 Starling, Wm., Boston Club, New Orleans, La. (47).
 Stearns, John Brainerd, B.S., 44 S. Willard St., Burlington, Vt. (44). **C**
 Stebbins, Miss Fannie A., 480 Union St., Springfield, Mass. (44). **G F**
 Steiger, George, Chemical Laboratory, U. S. Geological Survey, Washington, D. C. (40). **C E B**
 Stein, Dr. S. G., Muscatine, Iowa. (43).
 Stevens, Frank Lincoln, North High School, Columbus, Ohio. (44). **G**
 Stevenson, Francis L., 89 Lincoln Ave., Chicago, Ill. (47). **D**
 Stewart, Fred. Carlton, Jamaica, N. Y. (44). **G**
 Stewart, Oscar M., 23 Hazen St., Ithaca, N. Y. (46). **B**
 Stickney, Gardner P., 427 Bradford St., Milwaukee, Wis. (44). **H**
 Stillman, Prof. John M., Stanford University, Cal. (41).
 Stine, Prof. W. M., Swarthmore College, Swarthmore, Pa. (37). **A C**
 Stockbridge, Horace E., Ph.D., Lake City, Fla. (47). **C I**
 St. John, Charles E., Oberlin, Ohio. (46). **B**
 Stone, Prof. George E., State Agricultural College, Amherst, Mass. (48). **G**
 Stone, Lincoln R., M.D., Newton, Mass. (31).
 Stradling, Prof. George F., 3226 Arlington St., Philadelphia, Pa. (41).
 Strong, Edwin A., State Normal School, Ypsilanti, Mich. (46). **B**
 Strong, Frederick F., M.D., 176 Huntington Ave., Boston, Mass. (47).
C F
 Strong, Wendell M., 307 Welch Hall, New Haven, Conn. (44). **A B**
 Stubbs, W. C., Audubon Park, New Orleans, La. (40).
 Sullivan, J. A., 308 Main St., Malden, Mass. (27). **A**
 Swartzel, Karl D., 57 E. 8th Ave., Columbus, Ohio. (48). **A**
 Sweet, Henry N., 50 Beacon St., Boston, Mass. (40). **H D**
 TAFT, ELIHU B., Burlington, Vt. (36). **H**
 Talbott, Mrs. Laura Osborne, 1445 Huntington Place, Washington, D. C. (36). **F G I**
 TANNER, PROF. JOHN HENRY, 7 Central St., Ithaca, N. Y. (47). **A B**
 Taylor, Edward Randolph, Cleveland, Ohio. (39). **C**
 Taylor, Prof. Jas. M., Hamilton, Madison Co., N. Y. (33). **A D**
 Taylor, Robert S., Box 2019, Fort Wayne, Ind. (39).
 Thaw, Mrs. Mary Copley, Pittsburg, Pa. (41). **H**
 Thompson, Alton H., 721 Kansas Ave., Topeka, Kas. (33). **H**
 Thompson, Mrs. Frank, 233 S. 4th St., Philadelphia, Pa. (33).
 THOMPSON, FRED'K F., 283 Madison Ave., New York, N. Y. (36).
 Thompson, J. L., M.D., Indianapolis, Ind. (39). **F**
 Tight, Prof. William George, Granville, Ohio. (39). **E**

- Todd, Albert M., Kalamazoo, Mich. (37). **C**
- Towle, Wm. Mason, State College, Center Co., Pa. (44). **D**
- Townsend, Charles O., Maryland Agricultural College, College Park, Md. (46).
- Treat, Erastus B., Publisher and Bookseller, 5 Cooper Union, cor. 4th Ave. and 8th St., New York, N. Y. (29). **F I**
- Trowbridge, Augustus, Ph.D., 812 E. Catherine St., Ann Arbor, Mich. (47).
- Trowbridge, Rev. Chas. R., 223 Porter St., Easton, Pa. (46). **H I**
- Trowbridge, Luther H., East Grand Circus Park, Detroit, Mich. (29).
- Trowbridge, Mrs. M. E. D., East Grand Circus Park, Detroit, Mich. (21).
- I G**
- True, Rodney Howard, Wingra Park, Madison, Wis. (46). **G**
- Trueblood, Mary Esther, Ph.M., Earlham College, Richmond, Ind. (47).
- A**
- Turner, J. Spencer, 109 Duane St., New York, N. Y. (43). **B**
- Tyler, Dr. Harry Walter, 491 Boylston St., Boston, Mass. (47). **A**
- Vail, Prof. Hugh D., Santa Barbara, Cal. (18).
- Valentine, Edw. P., Richmond, Va. (33). **H**
- Van Antwerp, Rev. Francis J., 26 Harper Ave., Detroit, Mich. (46).
- VAN BEUREN, FREDERICK T., 21 W. 14th St., New York, N. Y. (36).
- Van Denberg, Joseph King, Fort Edward, N. Y. (47).
- Van Slyke, Lucius L., Agr. Expt. Station, Geneva, N. Y. (41).
- Varney, A. L., Major of Ordnance Dept., U. S. A., San Antonio Arsenal, San Antonio, Texas (44). **H**
- VAUX, GEO., Jr., 404 Girard Building, Philadelphia, Pa. (33). **E A**
- Villard, Fanny G., Dobbs Ferry, N. Y. (36).
- Vinal, W. Irving, 1106 East Capitol St., Washington, D. C. (40).
- E**
- Voorhees, Chas. H., M.D., 111 Carroll Place, New Brunswick, N. J. (29).
- F H**
- Vredenburg, Edw. H., 122 S. Fitzhugh St., Rochester, N. Y. (29).
- Wagner, George, University of Kansas, Lawrence, Kan. (46). **C F G**
- Waldron, Clare B., Agricultural College, Fargo, N. D. (45).
- Wales, Salem H., 25 E. 55th St., New York, N. Y. (36).
- Walker, Byron Edmund, Toronto, Ontario, Can. (38). **E**
- Walker, George C., Room 519, Rookery Building, Chicago, Ill. (17).
- Walker, James, Seth Thomas Clock Co., 49 Maiden Lane, New York, N. Y. (43).
- Wallace, Edwin Corby, Ph.G., Foot of Sixth St., Long Island City, N. Y. (47).
- Ward, Frank A., 16-26 College Ave., Rochester, N. Y. (40).
- Ward, J. Langdon, 120 Broadway, New York, N. Y. (29). **I**
- Ward, Robert De C., Harvard Univ., Cambridge, Mass. (47).
- Wardle, Harriet N., 125 N. 10th St., Philadelphia, Pa. (47). **E**
- Ware, Miss Mary L., 41 Brimmer St., Boston, Mass. (47).
- Ware, Wm. R., Columbia University, New York, N. Y. (36).

- Warner, Charles F., 837 State St., Springfield, Mass. (45) **B**
 Warren, Howard C., Ph.D., Princeton, N. J. (46).
 Warren, Mrs. Susan C., 67 Mt. Vernon St., Boston, Mass. (29).
 Warrington, James N., 1711 South Hope St., Los Angeles, Cal. (34).

D A B

- WATERS, GEO. F., 6 Somerset St., Boston, Mass. (29). **B F H E D**
 Watson, Miss C. A., North Andover, Mass. (31). **D**
 Watson, Thomas A., Weymouth, Mass. (42). **E**
 Watters, William, M.D., 26 S. Common St., Lynn, Mass. (40). **E G**
 Watts, A. J., M.D., 1123 Bedford Ave., Brooklyn, N. Y. (43).
 Weaver, Gerrit E. Hambleton, A.M., 203 De Kalb Square, West Philadelphia, Pa. (38). **G I**
 Webber, Herbert J., Dept. of Agriculture, Washington, D. C. (47).
 Webster, Prof. Arthur Gordon, Clark University, Worcester, Mass. (47).

B A

- Weed, J. N., 71 Water St., Newburgh, N. Y. (37). **E I**
 Weeks, Fred Boughton, U. S. Geological Survey, Washington, D. C. (44). **E**
 Weinzirl, John, 416 S. Arno St., Albuquerque, New Mex. (45). **G**
 Welch, William Henry, M.D., 935 St. Paul St., Baltimore, Md. (47).

F H

- Wells, Frank, M.D., 178 Devonshire St., Boston, Mass. (47). **C**
 Wells, Samuel, 31 Pemberton Square, Boston, Mass. (24). **H**
 Wernicke, Prof. Paul, 107 E. Maxwell St., Lexington, Ky. (44). **A B**
 Werum, Jno. H., Toledo, Ohio (40). **E F**
 Wetzler, Jos., 203 Broadway, New York, N. Y. (36).
 Wheeler, T. B., M.D., 123 Metcalfe St., Montreal, P. Q., Can. (11).
 Wheeler, William, C.E., Concord, Mass. (41).
 White, Charles G., Lake Linden, Mich. (46). **B C**
 White, Charles H., Medical Director U. S. N., U. S. Naval Museum of Hygiene, Washington, D. C. (34). **C**
 White, John Williams, Prof. of Greek, Harvard Univ., 18 Concord Ave., Cambridge, Mass. (47).
 White, LeRoy S., Box 924, Waterbury, Conn. (23).
 White, Thaddeus R., 257 W. 45th St., New York, N. Y. (42). **A**
 White, Theodore Greely, Ph.B., A.M., Columbia University, New York, N. Y. (47). **B E**
 Whitfield, Thomas, Ph.D., 240 Wabash Ave., Chicago, Ill. (41). **C**
 Whiting, Mrs. Francis, 914 W. Lafayette St., Norristown, Pa. (40).
 Whiting, S. B., 11 Ware St., Cambridge, Mass. (33). **D**
 Whitney, Miss Mary W., Vassar College Observatory, Poughkeepsie, N. Y. (47). **A**
 Whitney, Willis Rodney, 29 Fairmount, Jamestown, N. Y. (46). **C**
 Wiegand, Karl McKay, Ithaca, N. Y. (45). **G**
 Wilbour, Mrs. Charlotte B., Little Compton, R. I. (28).
 Wilcox, Miss Emily T., 299 College St., Middletown, Conn. (33). **B A**
 Williams, Charles B., Raleigh, N. C. (47).

- Williams, Henry Smith, M.D., 165 W. 82nd St., New York, N. Y. (34). **F**
 WILMARTH, MRS. HENRY D., 51 Eliot St., Jamaica Plain, Mass. (40).
 Wilmot, Thos. J., Commercial Cable Co., Waterville, County Kerry, Ireland (27). **B**
 Wilson, Prof. Andrew G., Lenox College, Hopkinton, Iowa (43). **E**
 Windsor, Sarah Sweet, A.B., M.D., 138 Marlboro St., Boston, Mass. (47). **F H**
 Wingate, Miss Hannah S., 15 W. 129th St., New York, N. Y. (31). **E I**
 Witmer, Dr. Lightner, University of Pennsylvania, Philadelphia, Pa. (46). **H**
 Wolcott, Mrs. Henrietta L. T., Dedham, Mass. (29).
 Wolff, Frank A., Jr., Ph.D., 1028 Vermont Ave., N. W., Washington, D. C. (47). **B**
 Wood, Mrs. Cynthia A., 171 W. 47th St., New York, N. Y. (43).
 Wood, Miss Elvira, 198 Adams St., Waltham, Mass. (47).
 Wood, Rob't Williams, Physical Department, University of Wisconsin, 515 State St., Madison, Wis. (46).
 WOOD, WALTER, 400 Chestnut St., Philadelphia, Pa. (33). **F I**
 Woodbury, Charles T., North Andover, Mass. (47). **C**
 Woodhull, John Francis, Teachers' College, Morningside Heights, New York, N. Y. (43).
 Worcester, Dean C., Ann Arbor, Mich. (46). **F H**
 Wright, Jonathan, M.D., 73 Remsen St., Brooklyn, N. Y. (43).
 Wright, John S., care Eli Lilly & Co., Indianapolis, Ind. (42). **G**
 Wright, Rufus, 333-339 Lake St., Chicago, Ill. (37). **B**
 WUNDERLICH, FREDERICK W., M.D., 165 Remsen St., Brooklyn, N. Y. (45).
 Yendell, Paul S., Winter St., Dorchester, Mass. (47). **A**
 Youmans, Mrs. Celia G., Mount Vernon, N. Y. (36).
 Youmans, Vincent J., Mount Vernon, N. Y. (43).

NOTE.—The omission of an address in the foregoing list indicates that letters mailed to that last printed were returned as uncalled for. Information of the present address of the members so indicated is requested by the PERMANENT SECRETARY.

SURVIVING FOUNDERS.

[At the Brooklyn Meeting, 1894, a resolution was unanimously adopted by which all surviving founders of the Association who have maintained an interest in science were made Honorary Life Members of the Association in recognition of their pioneer work in American Science.]

ABBOT, SAMUEL L., Boston, Mass.

BOYÉ, MARTIN H., Coopersburg, Pa.

DIXWELL, EPES S., Cambridge, Mass.

GIBBS, WOLCOTT, Newport, R. I.

HUBBARD, OLIVER PAYSON, New York, N. Y.

WEST, CHARLES E., Brooklyn, N. Y.

HONORARY FELLOWS.¹

- ROGERS, PROF. WILLIAM B., Boston, Mass. (1). 1881. (Born Dec. 7, 1804. Died May 30, 1882). **B E**
- CHEVREUL, MICHEL EUGÈNE, Paris, France. (35). 1886. (Born Aug. 31, 1786. Died April 9, 1889). **C**
- GENTH, DR. F. A., 3937 Locust St., Philadelphia, Pa. (24). 1888. (Born May 17, 1820. Died Feb. 2, 1892). **C E**
- HALL, PROF. JAMES, Albany, N. Y. (1). 1890. (Born in 1811. Died Aug. 7, 1898).
- GOULD, DR. BENJAMIN APTHORP, Cambridge, Mass. (2). 1895. (Born Sept. 27, 1824. Died Nov. 26, 1896). **A B**
- LEUCKART, PROF. RUDOLF. (44). 1895. (Born in Helmstedt, Braunschweig, Germany, Oct. 7, 1823. Died in Leipzig, Feb. 7, 1898). **F**
- GIBBS, PROF. WOLCOTT, Newport, R. I. (1). 1896. **C B**

FELLOWS.²

- Abbe, Professor Cleveland, Meteorologist, Weather Bureau, Department of Agriculture, Washington, D. C. (16). 1874. **B A**
- Abbe, Dr. Robert, 11 W. 50th St., New York, N. Y. (36). 1892.
- ABBOT, DR. SAMUEL L., 90 Mt. Vernon St., Boston, Mass. (1).
- Abert, S. Thayer, Metropolitan Club, Washington, D. C. (30). 1891. **A B**
- D E I**
- Adriance, John S., 105 E. 39th St., New York, N. Y. (39). 1895. **C**
- Alden, John, Pacific Mills, Lawrence, Mass. (36). 1898.
- Aldrich, Prof. William Sleeper, West Virginia University, Morgantown, W. Va. (43). 1897. **D**
- Alvord, Major Henry E., U. S. Department of Agriculture, Washington, D. C. (29). 1882. **I**
- Alwood, Prof. Wm. B., Agricultural and Mechanical College and Experiment Station, Blacksburg, Va. (39). 1891. **F**
- Andrews, Prof. Launcelot W., Iowa City, Iowa. (39). 1891. **C**
- Anthony, Prof. Wm. A., Cooper Union, New York, N. Y. (28). 1880. **B**
- Arthur, J. C., Lafayette, Ind. (21). 1883. **G**
- Ashmead, Wm. H., U. S. National Museum, Washington, D. C. (40). 1892. **F**
- Atkinson, Edward, 31 Milk St., Boston, Mass. (29). 1881. **I D**
- Atkinson, George F., Cornell University, Ithaca, N. Y. 39. (1892). **G**
- Atwater, Prof. W. O., Wesleyan University, Middletown, Conn. (29). 1882. **C**
- Atwell, Charles B., 1938 Sherman Ave., Evanston, Ill. (36). 1890. **G**
- Auchincloss, Wm. S., Hotel Beechwood, Summit, N. J. (29). 1886. **D A**
- Austen, Prof. Peter T., 99 Livingston St., Brooklyn, N. Y. (44). 1896. **C**

¹ See ARTICLE VI of the Constitution. ² See ARTICLE IV of the Constitution.

* * * The number in parenthesis indicates the meeting at which the member joined the Association; the date following is the year when made a Fellow; the black letters at end of line are those of the sections to which the Fellow belongs.

When the name is given in small capitals, it designates that the Fellow is also a Life Member.

- Avery, Elroy M., Ph.D., LL.D., 657 Woodland Hills Ave., Cleveland, Ohio. (37). 1889. **B**
- Ayres, Prof. Brown, Tulane University, New Orleans, La. (31). 1885. **B**
- Babcock, Prof. S. Moulton, Madison, Wis. (33). 1885. **C**
- Bailey, E. H. S., Lawrence, Douglas Co., Kan. (25). 1889. **C E**
- Baker, Frank, M.D., 1804 Columbia Road, Washington, D. C. (31). 1886. **F H**
- Baker, Marcus, U. S. Geological Survey, Washington, D. C. (30). 1882. **A**
- Baldwin, Prof. J. Mark, Princeton University, Princeton, N. J. (46). 1898. **H**
- Ballard, Harlan H., 50 South St., Pittsfield, Mass. (31). 1891. **E F**
- Barbour, Prof. Erwin H., Univ. of Nebraska, Lincoln, Nebr. (45). 1898. **E**
- BARKER, PROF. G. F., 3909 Locust St., Philadelphia, Pa. (13). 1875. **B C**
- Barnard, Edward E., care Yerkes Observatory, Lake Geneva, Williams Bay P. O., Wis. (26). 1883. **A**
- Barnes, Chas. Reid, Ph.D., Prof. of Plant Physiology, University of Chicago, Chicago, Ill. (33). 1885. **G**
- Barnum, Miss Charlotte C., Ph.D., 144 Humphrey St., New Haven, Conn. (36). 1896. **A**
- Barrows, Walter B., Agricultural College, Ingham Co., Mich. (40). 1897. **F**
- Bartlett, Prof. Edwin J., Dartmouth College, Hanover, N. H. (28). 1883. **C**
- Bartlett, John R., Commander U. S. N., Lonsdale, R. I. (30). 1882. **E B**
- Bartley, Elias H., M.D., 21 Lafayette Ave., Brooklyn, N. Y. (33). 1894. **C**
- Barton, G. E., 27 Main St., Millville, N. J. (46). 1898. **C**
- Barus, Carl, Ph.D., Wilson Hall, Brown University, Providence, R. I. (33). 1887. **B**
- Bascom, Miss Florence, Bryn Mawr College, Bryn Mawr, Pa. (42). 1897. **E**
- Baskerville, Charles, University of North Carolina, Chapel Hill, N. C. (41). 1894. **C E**
- Bassett, Homer F., Waterbury, Conn. (23). 1874. **F**
- Bauer, Louis A., Ph.D., U. S. C. & G. Survey, Washington, D. C. (40). 1892. **A**
- Bausch, Edw., P. O. Drawer 1033, Rochester, N. Y. (26). 1883. **A B C F**
- Beal, Prof. Wm. James, Agricultural College, Ingham Co., Mich. (17). 1880. **G**
- Beardsley, Prof. Arthur, C.E., Ph.D., Swarthmore College, Swarthmore, Del. Co., Pa. (33). 1885. **D**
- Bedell, Frederick, Ph.D., Cornell University, Ithaca, N. Y. (41). 1894. **B A**
- Bell, Alex. Melville, 1525 35th St., Washington, D. C. (31). 1885. **H**
- Bell, Robert, M.D., LL.D., F.R.S., Geological Survey, Ottawa, Can. (38). 1889. **E F**
- Beman, Wooster W., 19 S. 5th St., Ann Arbor, Mich. (34). 1886. **A**
- BENJAMIN, MARCUS, Smithsonian Institution, Washington, D. C. (27). 1887. **C**

- Benjamin, Rev. Raphael, M.A., Hotel Premier, 72nd St., New York, N. Y. (34). 1887. **E F G H**
- Bessey, Prof. Charles E., University of Nebraska, Lincoln, Neb. (21). 1880. **G**
- Bethune, Rev. C. J. S., Trinity College School, Port Hope, Ontario, Can. (18). 1875. **F**
- Bickmore, Prof. Alqert S., American Museum of Natural History, Central Park, New York, N. Y. (17). 1880. **H**
- Bigelow, Prof. Frank H., U. S. Weather Bureau, Washington, D. C. (36). 1888. **A**
- BIXBY, MAJOR W. H., U. S. A., Custom House, Cincinnati, Ohio. (34). 1892. **D**
- Blair, Andrew A., 406 Locust St., Philadelphia, Pa. (44). 1896. **C**
- Blake, Clarence J., M.D., 226 Marlborough St., Boston, Mass. (24). 1877. **B F**
- Blake, Francis, Auburndale, Mass. (23). 1874. **B A**
- Bleile, Albert M., M.D., Prof. of Physiology, State University, Columbus, Ohio (37). 1896. **F**
- Blue, Archibald, Director of the Bureau of Mines, Toronto, Can. (35). 1890. **I**
- Bolley, Henry L., North Dakota Experiment Station, Fargo, North Dakota (39). 1892. **G**
- BOLTON, DR. H. CARRINGTON, Cosmos Club, Washington, D. C. (17). 1875. **C**
- Bond, Geo. M., care of The Pratt & Whitney Co., Hartford, Conn. (33). 1885. **D**
- Booth, Miss Mary A., 32 Byers St., Springfield, Mass. 1894. (34). **F I G**
- Bowditch, Charles P., 28 State St., Boston, Mass. (43). 1897. **H**
- Bowditch, Prof. H. P., Jamaica Plain, Mass. (28). 1880. **F B H**
- Bowser, Prof. E. A., Rutgers College, New Brunswick, N. J. (28). 1881.
- BOYÉ, MARTIN H., M.D., Coopersburg, Lehigh Co., Pa. (1). 1896. **C**
- Brackett, Richard N., Associate Professor of Chemistry, Clemson College, S. C. (37). 1891. **C E**
- Bradford, Royal B., Commander U. S. N., care Navy Dep't, Washington, D. C. (31). 1891. **B D**
- Branner, Prof. John C., Stanford University, Cal. (34). 1886. **E F**
- Brashear, Jno. A., Allegheny, Pa. (33). 1885. **A B D**
- Brinton, D. G., M.D., Media, Pa. (33). 1885. **H**
- Bristol, Wm. H., Stevens Institute, Hoboken, N. J. (36). 1894. **A B D**
- Britton, N. L., Ph.D., Director-in-chief N. Y. Botanical Garden, 41 E. 49th St., New York, N. Y. (29). 1882. **G E**
- Brooks, Wm. R., D.Sc., Director Smith Observatory, Geneva, N. Y. (35). 1886. **A B D G**
- Brown, Robert, care of Yale University Observatory, New Haven, Conn. (11). 1874. **A**
- Brown, Mrs. Robert, New Haven, Conn. (17). 1874.

Brühl, Gustav, cor. John and Hopkins Sts., Cincinnati, Ohio. (28). 1886.

H

Brush, Charles F., Brush Electric Light Co., Cleveland, Ohio. (35). 1886. **B**

BRUSH, PROF. GEORGE J., Yale University, New Haven, Conn. (4). 1874. **C E**

Bull, Prof. Storm, Madison, Wis. (44). 1897. **D**

Burgess, Dr. Thomas J. W., Med. Sup't Protestant Hospital for the Insane, Montreal, P. Q., Can. (38). 1889. **G**

Burr, Prof. William H., School of Mines, 41 E. 49th St., New York, N. Y. (31). 1883.

Butler, A. W., Secretary Board of State Charities, Indianapolis, Ind. (30). 1885. **F H**

Caldwell, Prof. Frank C., Ohio State University, Columbus, Ohio. (46). 1898. **B D**

Caldwell, Prof. George C., Cornell University, Ithaca, N. Y. (23). 1875. **C**

Calvin, Prof. Samuel, State University of Iowa, Iowa City, Iowa. (37). 1889. **E F**

Campbell, Prof. Douglas H., Stanford University, Cal. (34). 1888. **G**

Canby, William M., 1101 Delaware Avenue, Wilmington, Del. (17). 1878. **G**

Carhart, Prof. Henry S., University of Michigan, Ann Arbor, Mich. (29). 1881. **B**

Carpenter, Louis G., Agricultural College, Fort Collins, Col. (32). 1889. **A B**

Carter, James Madison G., M.D., Waukegan, Ill. (39). 1895. **F**

Casey, Thomas L., U. S. Engineer Office, Norfolk, Va. (38). 1892. **F**

Catlin, Charles A., 133 Hope St., Providence, R. I. (33). 1895. **C**

CATTELL, PROF. JAMES MCKEEN, Columbia University, New York, N. Y. (44). 1896. **B F H I**

Chalmot, G. de, Holcomb Rock, Va. (44). 1896. **C**

Chamberlin, T. C., 5041 Madison Ave., Chicago, Ill. (21). 1877. **E B F H**

Chandler, Prof. C. F., School of Mines, Columbia University, New York, N. Y. (19). 1875. **C**

Chandler, Prof. Charles Henry, Ripon, Wis. (28). 1883. **A**

Chandler, Seth C., 16 Craigie St., Cambridge, Mass. (29). 1882. **A**

Chanute, O., 413 E. Huron St., Chicago, Ill. (17). 1877. **D I**

Chase, Frederick L., Yale University Observatory, New Haven, Conn. (43). 1896. **A**

Chester, Prof. Albert H., Rutgers College, New Brunswick, N. J. (29). 1882. **C F**

Chester, Captain Colby M., U. S. N., care Navy Department, Washington, D. C. (28). 1897. **E**

Chickering, Prof. J. W., Deaf Mute College, Washington, D. C. (22). 1877. **G I**

Christie, James, Pencoyd, Pa. (33). 1894. **D**

- Chute, Horatio N., Ann Arbor, Mich. (34). 1889. **B C A**
- Clapp, Miss Cornelia M., Mt. Holyoke College, South Hadley, Mass. (31). 1883. **F**
- Clarke, Prof. F. W., U. S. Geological Survey, Washington, D. C. (18). 1874. **C**
- Clark, Prof. John E., 445 Orange St., New Haven, Conn. (17). 1875. **A**
- Clark, Wm. Bullock, Ph.D., Johns Hopkins University, Baltimore, Md. (37). 1891. **E**
- Clarke, John Mason, Ass't State Geologist and Palæontologist of N. Y., State Hall, Albany, N. Y. (45). 1897. **E**
- Clarke, Robert, Glendale, Ohio. (30). 1895. **H**
- Claypole, Prof. Edward W., Polytechnic Institute, Pasadena, Cal. (30). 1882. **E F**
- Cloud, John W., 974 Rookery, Chicago, Ill. (28). 1886. **A B D**
- Cochran, C. B., 514 South High St., West Chester, Chester Co., Pa. (43). 1896. **C**
- Coffin, Selden J., Lafayette College, Easton, Pa. (22). 1874. **A I**
- Cogswell, W. B., Syracuse, N. Y. (33). 1891. **D**
- COLBURN, RICHARD T., Elizabeth, N. J. (31). 1894. **I F H**
- Cole, Prof. Alfred D., Denison University, Granville, Ohio. (39). 1891. **B C**
- Collin, Prof. Alonzo, Cornell College, Mount Vernon, Iowa. (21). 1891. **B C**
- Collingwood, Francis, Elizabeth, N. J. (36). 1888. **D**
- Comstock, Prof. Geo. C., Washburn Observ., Univ. of Wisconsin, Madison, Wis. (34). 1887. **A**
- Conant, Prof. L. L., Polytechnic Institute, Worcester, Mass. (39). 1892. **A**
- Cooley, Prof. Le Roy C., Vassar College, Poughkeepsie, N. Y. (19). 1880. **B C**
- Corthell, Elmer L., 27 Pine St., New York, N. Y. (34). 1886. **D I E**
- Cowles, Alfred H., 656 Prospect St., Cleveland, Ohio. (37). 1897. **B C**
- Crafts, James Mason, Pres. Mass. Institute Technology, Boston, Mass. (47). 1898. **C**
- Crampton, Chas. A., M.D., Office of Internal Revenue, Treasury Department, Washington, D. C. (36). 1887. **C**
- Crandall, Prof. Charles S., Fort Collins, Col. (40). 1894.
- Crawford, Prof. Morris B., Middletown, Conn. (30). 1889. **B**
- Crockett, Charles W., Rensselaer Polytechnic Institute, Troy, N. Y. (39). 1894. **A D**
- Cross, Prof. Charles R., Massachusetts Institute Technology, Boston, Mass. (29). 1880. **B**
- Cushing, Frank H., Bureau of Ethnology, Washington, D. C. (40). 1893. **H**
- Cushing, Henry Platt, Adelbert College, Cleveland, Ohio (33). 1888. **E**
- Dall, William H., Smithsonian Institution, Washington, D. C. (18). 1874. **H F**

- DALY, HON. CHARLES P., 84 Clinton Place, New York, N. Y. (36). 1898.
E H
- Dana, Edward Salisbury, New Haven, Conn. (23). 1875. **B E**
- Darton, Nelson H., U. S. Geological Survey, Washington, D. C. (37).
1893.
- Davenport, Charles Benedict, Ph.D., 11 Francis Ave., Cambridge Mass.
(46). 1898. **F**
- Davidson, Prof. George, Consulting Engineer, 530 California St., San
Francisco, Cal. (29). 1881. **A B D**
- Davis, Bradley Moore, Dep't of Botany, University of Chicago, Chicago,
Ill. (45). 1897. **G**
- Davis, C. H., Commander U. S. N., Navy Department, Washington, D. C.
(40). 1896.
- Davis, Prof. Wm. Morris, Cambridge, Mass. (33). 1885. **E B**
- Dawson, Geo. M., S.S.C., F.G.S., Geol. Survey, Ottawa, Can. (38).
1895. **E**
- Dawson, Sir William, Principal McGill College, Montreal, Can. (10).
1875. **E**
- Day, David F., Buffalo, N. Y. (35). 1887. **G**
- Day, Fisk, H., M.D., 309 Sycamore St., Lansing, Mich. (20). 1874.
E H F
- Dennis, Louis Monroe, Cornell University, Ithaca, N. Y. (43). 1895. **C**
- Denton, Prof. James E., Stevens Institute, Hoboken, N. J. (36). 1888.
D B A
- Derby, Orville A., Sao Paulo, Brazil; S. A. (39). 1890.
- Dewey, Frederic P., 702 9th St., N. W., Washington, D. C. (30). 1886.
C E
- Dimmock, George, 679 State St., Springfield, Mass. (22). 1874. **F**
- DIXWELL, EPES S., Cambridge, Mass. (1). 1896. **H F**
- Dodge, Charles R., U. S. Dep't Agriculture, Washington, D. C. (22).
(1874).
- Dodge, Chas. W., M.S., Univ. of Rochester, Rochester, N. Y. (39). 1898. **F**
- Dolbear, Prof. A. Emerson, Tufts College, Mass. (20). 1880. **B**
- Doolittle, Prof. C. L., University of Pennsylvania, Philadelphia, Pa. (25).
1885. **A**
- Dorsey, George A., Ph.D., Ass't in Anthropology, Field Columbian
Museum, Chicago, Ill. (39). 1892. **H**
- Dorsey, N. Ernest, Ph.D., Annapolis Junction, Md. (46). 1898. **B**
- Douglass, Andrew E., American Museum of Natural History, Central
Park, New York, N. Y. (31). 1885. **H**
- DRAPER, DAN'L, Ph.D., Director N. Y. Meteorological Observatory, Cen-
tral Park, 64th St., Fifth Ave., New York, N. Y. (29). 1881. **B D F A**
- Drown, Prof. Thos. M., Lehigh University, South Bethlehem, Pa. (29).
1881. **C**
- DU BOIS, PROF. AUG. J., New Haven, Conn. (30). 1882. **A B D**
- Du Bois, Patterson, Ass't Editor S.S.T., 1031 Walnut St., Philadelphia,
Pa. (33). 1887. **H C I**

- Dudley, Charles B., Drawer 334, Altoona, Pa. (23). 1882. **C B D**
- DUDLEY, WM. L., Prof. of Chemistry, Vanderbilt University, Nashville, Tenn. (28). 1881. **C**
- Dudley, Prof. Wm. R., Stanford University, Cal. (29). 1883. **G**
- Dumble, E. T., 1708 Prairie Ave., Houston, Tex. (37). 1891. **E**
- Dunham, Edw. K., 338 E. 26th St., New York, N. Y. (30). 1890.
- Dunnington, Prof. F. P., University Station, Charlottesville, Va. (26). 1880. **C**
- Du Pont, Francis G., Wilmington, Del. (33). 1896. **A B D**
- Durand, Prof. W. F., Ph.D., Cornell University, Ithaca, N. Y. (37). 1890. **B**
- Dwight, Prof. William B., Vassar College, Poughkeepsie, N. Y. (30). 1882. **E F**
- Dyar, Harrison G., A.M., Ph.D., U. S. National Museum, Washington, D. C. (43). 1898.
- Eastman, Charles Rochester, Museum Comparative Zoology, Cambridge, Mass. (41). 1896. **E F**
- Eastman, Prof. J. R., Andover, N. H. (26). 1879. **A**
- Eccles, Robert G., M.D., 191 Dean St., Brooklyn, N. Y. (31). 1894. **F C**
- Eddy, Prof. H. T., University of Minnesota, Minneapolis, Minn. (24). 1875. **A B D**
- Edison, Thos. A., Orange, N. J. (27). 1878. **B**
- Egleston, Prof. Thomas, 35 W. Washington Square, New York, N. Y. (27). 1879. **C D E**
- Eichelberger, William Snyder, Ph.D., Nautical Almanac Office, U. S. Naval Observatory, Washington, D. C. (41). 1896. **A**
- Einbeck, William, U. S. Coast and Geodetic Survey, Washington, D. C. (17). 1874. **A B D**
- Elkin, William L., Yale University Observatory, New Haven, Conn. (33). 1885. **A**
- Ely, Theo. N., Chief of Motive Power, Pennsylvania R. R., Broad St. Station, Philadelphia, Pa. (29). 1886.
- Emerson, Prof. Benjamin K., Box 203, Amherst, Mass. (19). 1877. **E F**
- EMERSON, PROF. C. F., Box 499, Hanover, N. H. (22). 1874. **B A**
- Emery, Albert H., Stamford, Conn. (29). 1884. **D B**
- EMMONS, S. F., U. S. Geological Survey, Washington, D. C. (26). 1879. **E**
- Engelman, George J., M.D., 336 Beacon St., Boston, Mass. (25). 1875. **F H**
- Ewell, Ervin E., 3644 13th St., N. W., Washington, D. C. (40). 1896. **C**
- Eyerman, John, "Oakhurst," Easton, Pa. (33). 1889. **E C**
- Fairbanks, Henry, Ph.D., St. Johnsbury, Vt. (14). 1874. **B D A**
- Fairchild, David Grandison, Dept. of Agriculture, Washington, D. C. (47). 1898. **G**
- Fairchild, Prof. H. L., University of Rochester, Rochester, N. Y. (28). 1883. **E F**
- Fanning, John T., Consulting Engineer, Kasota Block, Minneapolis, Minn. (29). 1885. **D**

- Fargis, Rev. Geo. A., Boston College, 761 Harrison Ave., Boston, Mass. (40). 1892.
- Farlow, Dr. W. G., 24 Quincy St., Cambridge, Mass. (20). 1875. **G**
- Farquhar, Henry, Dep't of Agric., Washington, D. C. (33.) 1886. **A I G B**
- Fernow, Bernhard E., Director of School of Forestry, Cornell University, Ithaca, N. Y. (31). 1887. **G I**
- Ferry, Ervin S., University of Wisconsin, Madison, Wis. (41). 1896.
- Firmstone, F., Easton, Pa. (33). 1887. **D**
- Fitz, George W., M.D., 7 Scott St., Cambridge, Mass. (47). 1898. **H**
- Flather, Prof. John J., 316 Tenth Ave., S. E. Minneapolis, Minn. (44). 1896. **D**
- Fletcher, Miss Alice C., care Peabody Museum, Cambridge, Mass. (29). 1883. **H**
- Fletcher, Dr. Robert, Army Medical Museum, Washington, D. C. (29). 1881. **F H**
- Flint, Albert S., Washburn Observatory, Madison, Wis. (30). 1887. **A**
- Flint, James, M., Surgeon U. S. N., Smithsonian Institution, Washington, D. C. (28). 1882. **F**
- Ford, Prof. D. R., Elmira, N. Y. (41). 1894. **A B**
- Fox, Oscar C., U. S. Patent Office, Washington, D. C. (36). 1891. **B D A**
- Franklin, William S., Lehigh University, So. Bethlehem, Pa. (36). 1892. **B**
- FRAZER, DR. PERSIFOR, Drexel Building, Room 1042, Philadelphia, Pa. (24). 1879. **E C**
- Frazier, Prof. B. W., The Lehigh University, So. Bethlehem, Pa. (24). 1882. **E C**
- Freer, Prof. Paul C., Ann Arbor, Mich. (39). 1891. **C**
- French, Prof. Thomas, Jr., Ridgeway Ave., Avondale, Cincinnati, Ohio (30). 1883. **B**
- Fries, Dr. Harold H., 92 Reade St., New York, N. Y. (40). 1898. **C**
- Frisby, Prof. Edgar, U. S. N. Observatory, Washington, D. C. (28). 1880. **A**
- Frost, Edwin Brant, Yerkes Observatory, Williams Bay, Wis. (38). 1890. **A B**
- Fuller, Prof. Homer T., President Drury College, Springfield, Mo. (35). 1891. **C E**
- Fulton, Robert B., Chancellor University of Mississippi, University, Miss. (21). 1887. **B A**
- Gaffield, Thomas, 54 Allen St., Boston, Mass. (29). 1889. **C B**
- Gage, Prof. Simon Henry, Ithaca, N. Y. (28). 1881. **F**
- Galbraith, Prof. John, Toronto, Can. (38). 1889. **D**
- Gibbs, Prof. J. Willard, New Haven, Conn. (33). 1885. **B**
- Gilbert, G. K., U. S. Geological Survey, Washington, D. C. (18). 1874. **E**
- Gill, Adam Capen, Cornell University, Ithaca, N. Y. (38). 1894. **E**
- Gill, Augustus Herman, Massachusetts Institute Technology, Boston, Mass. (44). 1896. **C**
- Gill, Prof. Theo., Columbian University, Washington, D. C. (17). 1874. **F**
- Gillman, Henry, 107 Fort St. West, Detroit, Mich. (24). 1875. **H F G**

- Gilman, Daniel C., President Johns Hopkins University, Baltimore, Md. (10). 1875. **E H**
- Glenn, William, 1348 Block St., Baltimore, Md. (33). 1893. **C**
- Goessman, Prof. C. A., Massachusetts Agricultural College, Amherst, Mass. (18). 1875. **C**
- Goff, E. S., 1113 University Ave., Madison, Wis. (35). 1889.
- Gold, Theodore S., West Cornwall, Conn. (4). 1887. **B C**
- Golden, Miss Katherine E., Lafayette, Ind. (42). 1897. **G**
- Goldschmidt, S. A., Ph.D., 43 Sedgwick St., Brooklyn, N. Y. (24). 1880. **C E B**
- Goldsmith, Edw., 658 N. 10th St., Philadelphia, Pa. (29). 1892. **C B**
- Gooch, Frank A., Yale University, New Haven, Conn. (25). 1880. **C**
- Goodale, Prof. G. L., Botanic Gardens, Cambridge, Mass. (18). 1875. **G**
- Goodspeed, Arthur Willis, A.B., Ph.D., University of Pennsylvania, Philadelphia, Pa. (47). 1898. **A B**
- Goss, Prof. Wm. F. M., Lafayette, Ind. (39). 1896.
- GRANT, MRS. MARY J., 36 Division St., Danbury, Conn. (23). 1874. **A**
- Gratacap, L. P., Ph.B., 77th St. and 8th Ave., New York, N. Y. (27). 1884. **C E F**
- Gray, Prof. Thomas, Terre Haute, Ind. (38). 1889. **D**
- Green, Arthur L., Purdue University, Lafayette, Ind. (33). 1888. **C**
- Grimes, J. Stanley, 1421 Wesley Ave., Evanston, Ill. (17). 1874. **E H**
- Grindley, Harry Sands, 918 W. Green St., Urbana, Ill. (46). 1898. **C**
- Grinnell, George Bird, 346 Broadway, New York, N. Y. (25). 1885. **F E**
- Griswold, Leon Stacy, 238 Boston St., Dorchester, Mass. (38). 1893. **E**
- Gruener, Hippolyte, Adelbert College, Cleveland, Ohio (44). 1898.
- Gunckel, Lewis W., 435 W. Second St., Dayton, Ohio (41). 1897. **H**
- Guthe, Karl E., Ph.D., University of Michigan, 904 S. State St., Ann Arbor, Mich. (45). 1897. **B D**
- Hague, Arnold, U. S. Geological Survey, Washington, D. C. (26). 1879. **E**
- Haines, Reuben, Haines and Chew Sts., Germantown, Philadelphia, Pa. (27). 1889. **C B**
- Hale, Albert C., Ph.D., 551 Putnam Ave., Brooklyn, N. Y. (29). 1886. **C B**
- Hale, Geo. E., Yerkes Observatory, Williams Bay, Wis. (37). 1891. **A B C**
- Hale, William H., Ph.D., 40 First Place, Brooklyn, N. Y. (19). 1874. **I F H C B E A**
- Hall, Arthur G., 1036 Oakland Ave., Ann Arbor, Mich. (41). 1896. **A B**
- Hall, Prof. Asaph, 12 Kirkland Place, Cambridge, Mass. (25). 1877. **A**
- Hall, Asaph, Jr., University of Michigan, Ann Arbor, Mich. (38). 1890. **A**
- Hall, Prof. C. W., Dean College Engineering Met. and Mechan. Arts, University of Minnesota, Minneapolis, Minn. (28). 1883. **D E**
- Hall, Prof. Edwin H., 5 Avon St., Cambridge, Mass. (29). 1881. **B**
- Hall, Prof. Lyman B., Haverford College, Haverford, Pa. (31). 1884. **C**
- Hallock, Albert P., Ph.D., 440 First Ave., New York, N. Y. (31). 1896. **C**

- Hallock, Dr. William, Columbia University, New York, N. Y. (40). 1893. **B E**
- Hallowell, Miss Susan M., Wellesley College, Wellesley, Mass. (33). 1890. **G**
- Halsted, Byron D., New Jersey Agricultural Experiment Station, New Brunswick, N. J. (29). 1883. **G**
- Hambach, Dr. G., 1319 Lami St., St. Louis, Mo. (26). 1891. **E F**
- Hamlin, Dr. A. C., Bangor, Me. (10). 1874. **C E H**
- HANAMAN, C. E., Troy, N. Y. (19). 1883. **F**
- Hardy, Prof. A. S., Dartmouth College, Hanover, N. H. (28). 1883. **A**
- Hargitt, Prof. Charles W., Syracuse University, Syracuse, N. Y. (38). 1891. **F**
- HARKNESS, PROF. WILLIAM, U. S. N. Observatory, Washington, D. C. (26). 1878. **A D C B**
- Harris, Abram Winegardner, Sc.D., President Maine State College, Orono, Me. (40). 1895. **C**
- Harris, Prof. E. P., Amherst College, Amherst, Mass. (44). 1896.
- Harris, Uriah R., Lieutenant Com'dr, U. S. N., care Navy Dep't, Washington, D. C. (34). 1886. **A**
- Hart, Edw., Ph.D., Lafayette College, Easton, Pa. (33). 1885. **C**
- Haskell, Eugene E., U. S. Engineer Office, Telephone Building, Detroit, Mich. (39). 1896. **A B D**
- HASTINGS, C. S., Sheffield Scientific School of Yale University, New Haven, Conn. (25). 1878. **B**
- Hayford, John F., C. E., 1514 Howard Ave., Washington, D. C. (46). 1898. **A B D**
- Haynes, Prof. Henry W., 239 Beacon St., Boston, Mass. (28). 1884. **H**
- Hedrick, Henry B., A.B., Glencarlyn, Alexandria Co., Va. (40). 1896.
- Hering, Rudolph, Civil and Sanitary Engineer, 100 William St., New York, N. Y. (33). 1885. **D E I**
- Herty, Chas. Holmes, Ph.D., University of Georgia, Athens, Ga. (42). 1895. **C**
- Hervey, Rev. A. B., Bath, Me. (22). 1879. **F**
- Hilgard, Prof. E. W., University of California, Berkeley, Cal. (11). 1874. **C E B**
- Hill, John Edward, Brown University, Providence, R. I. (44). 1897. **D**
- Hill, Robert Thomas, U. S. Geological Survey, Washington, D. C. (36). 1889. **E**
- Hillyer, Homer W., Ph.D., Chemical Laboratory, Univ. of Wisconsin, Madison, Wis. (42). 1896. **C**
- Himes, Prof. Charles F., Carlisle, Pa. (29). 1882. **B C**
- Hinrichs, Dr. Gustavus, 3132 Lafayette Ave., St. Louis, Mo. (17). 1874. **C B**
- HITCHCOCK, PROF. CHARLES H., Hanover, N. H. (11). 1874. **E**
- Hitchcock, Romyne, 36 Wall St., New York, N. Y. (47). 1898. **C B**
- Hobbs, William Herbert, Ph.D., Madison, Wis. (41). 1893. **E**

- Hodgkins, Prof. H. L., Columbian University, Washington, D. C. (40). 1896. **A B**
- Hoffmann, Dr. Fred., Charlottenburg, Kant St. 125, Berlin, Germany (28). 1881. **C F**
- Holland, W. J., D.D., LL.D., Chancellor Western University of Pennsylvania, Pittsburg, Pa. (37). 1896. **F**
- Hollick, Arthur, Columbia University, New York, N. Y. (31). 1892. **G E**
- Holmes, Prof. Jos. A., Chapel Hill, N. C. (33). 1887. **E F**
- Holmes, Wm. H., National Museum, Washington, D. C. (30). 1883. **H**
- Hopkins, Thos. C., Geologist, State College, Centre Co., Pa. (38). 1898. **E**
- Horsford, Miss Cornelia, 27 Craigie St., Cambridge, Mass. (46). 1897. **H**
- Hough, Prof. G. W., Northwestern University, Evanston, Ill. (15). 1874. **A**
- Hough, Walter, U. S. National Museum, Washington, D. C. (38). 1890.
- Hovey, Edmund O., American Museum Natural History, Central Park, New York, N. Y. (36). 1895. **C E**
- Hovey, Rev. Horace C., 60 High St., Newburyport, Mass. (29). 1883. **E H**
- Howard, Prof. Curtis C., 97 Jefferson Ave., Columbus, Ohio. (38). 1892. **C**
- Howard, Leland O., Dep't of Agriculture, Washington, D. C. (37). 1889. **F**
- Howe, Charles S., Prof. of Mathematics, Case School of Applied Science, Cleveland, Ohio. (34). 1891. **A**
- Howe, Prof. Jas. Lewis, Washington and Lee University, Lexington, Va. (36). 1888. **C**
- Howell, Edwin E., 612 17th St., N. W., Washington, D. C. (25). 1891. **E**
- Hrdlicka, Alès, M.D., 130 E. 93d St., New York, N. Y. (46). 1897. **H**
- HUBBARD, PROF. OLIVER PAYSON, 117 W. 55th St., New York, N. Y. (1). 1896.
- Hunter, Andrew Frederick, Barrie, Ontario, Can. (38). 1896. **B H I**
- Hyatt, Prof. Alpheus, Natural History Society, Back Bay, Boston, Mass. (18). 1875. **E F**
- Hyde, Prof. E. W., Station D, Cincinnati, Ohio. (25). 1881. **A**
- Hyde, John, Statistician U. S. Dep't Agric., Washington, D. C. (47). 1898. **I E**
- Iddings, Joseph P., University of Chicago, Chicago, Ill. (31). 1884. **E**
- ILES, GEORGE, 5 Brunswick St., Montreal, Can. 31. (1898). **I**
- Ives, Frederick E., 2750 N. 11th St., Philadelphia, Pa. (44). 1898. **B**
- Jack, John G., Jamaica Plain, Mass. (31). 1890. **G**
- Jackson, Prof. Charles L., Harvard University, Cambridge, Mass. (44). 1895. **C**
- Jackson, Dr. Robert T., 33 Gloucester St., Boston, Mass. (37). 1890. **F**
- Jacobus, David S., Stevens Institute, Hoboken, N. J. (36). 1889. **D B A**
- Jacoby, Harold, Columbia University, New York, N. Y. (38). 1891. **A**
- Jacoby, Henry S., Cornell University, Ithaca, N. Y. (36). 1892. **D**

- Jastrow, Dr. Jos., University of Wisconsin, Madison, Wis. (35). 1887. **H F**
 Jayne, Horace F., 1826 Chestnut St., Philadelphia, Pa. (29). 1884. **F H**
 Jeffries, B. Joy, M.D., 15 Chestnut St., Boston, Mass. (29). 1881. **F H**
 Jenkins, Edw. H., Drawer 101, New Haven, Conn. (33). 1885. **C**
 Jenks, Elisha T., Middleborough, Mass. (22). 1874. **D**
 Jennings, Walter L., 900 Beacon St., Boston, Mass. (45). 1898.
 Jesup, Prof. Henry G., Dartmouth College, Hanover, N. H. (36). 1891.
F
 Jesup, Morris K., 44 Pine St., New York. N. Y. (29). 1891. **I**
 Jillson, Dr. B. C., 6045 Bond St., Pittsburg, Pa. (14). 1881. **E H F**
 Johnson, John B., Washington University, St. Louis, Mo. (33). 1886. **D**
 Johnson, Otis C., 52 Thayer St., Ann Arbor, Mich. (34). 1886. **C**
 Jones, Lewis R., Burlington, Vt. (41). 1894. **G**
 Jordan, Prof. David S., Stanford University, Cal. (31). 1883. **F**
 Julien, A. A., New York Academy of Sciences, New York, N. Y. (24).
 1875. **E C**
 Kahlenberg, Louis, Ph.D., 306 Lake St., Madison, Wis. (46). 1898. **C**
 Kastle, Prof. J. H., State College of Kentucky, Lexington, Ky. (45).
 1898. **C**
 Kedzie, Prof. Nellie S., Peoria, Ill. (34). 1890. **I F**
 Kedzie, Prof. Robert C., Agricultural College, Mich. (29). 1881. **C**
 Keep, Wm. J., Detroit, Mich. (37). 1897.
 Kellerman, Prof. William A., Ohio State University, Columbus, Ohio
 (41). 1893. **G**
 Kemp, James F., School of Mines, Columbia University, New York,
 N. Y. (36). 1888. **E**
 Kendrick, Prof. Arthur, Rose Polytechnic Institute, Terre Haute, Ind.
 (45). 1897. **B**
 Kent, William, Passaic, N. J. (26). 1881. **D I**
 Kenyon, Frederick C., Washington, D. C. (46). 1897. **F**
 Kershner, Prof. Jefferson E., Lancaster City, Pa. (29). 1883. **A B**
 Kinealy, John H., Washington University, St. Louis, Mo. (36). 1891. **D**
 King, F. H., Experiment Station, Madison, Wis. (32). 1892. **E F**
 Kingsbury, Prof. Albert, Durham, N. H. (43). 1898. **D**
 Kinnicutt, Dr. Leonard P., Polytechnic Institute, Worcester, Mass. (28).
 1883. **C**
 Klotz, Otto Julius, 437 Albert St., Ottawa, Can. (38). 1889.
 Kober, Geo. Martin, M.D., 1819 Q St., N. W., Washington, D. C. (40).
 1896. **H**
 Kunz, G. F., Care Messrs. Tiffany & Co., Union Square, New York, N. Y.
 (29). 1883. **E H C**
 Lacoe, Ralph D., Pittston, Pa. (31). 1893. **E F**
 Ladd, Prof. E. F., Agricultural College, Fargo, No. Dakota (36). 1889.
C
 Laflamme, Prof. J. C. K., Laval University, Quebec, Can. (29). 1887. **E B**
 LaFlesche, Francis, Indian Bureau, Interior Dep't, Washington, D. C.
 (33). 1885. **H**

- Lamb, Daniel S., M.D., 800 10th St., N. W., Washington, D. C. (40). 1894. **H**
- Lambert, Preston A., 215 S. Center St., Bethlehem, Pa. (41). 1896. **A**
- Landreth, Olin H., Union College, Schenectady, N. Y. (28). 1883. **D**
- Langley, Prof. S. P., Secretary Smithsonian Institution, Washington, D. C. (18). 1874. **A B**
- Lanza, Prof. Gaetano, Massachusetts Institute of Technology, Boston, Mass. (29). 1882. **D A B**
- Lattimore, Prof. S. A., University of Rochester, Rochester, N. Y. (15). 1874. **C**
- Laudy, Louis H., Ph.D., School of Mines, Columbia University, New York, N. Y. (28). 1890. **C**
- Lazenby, Prof. Wm. R., Columbus, Ohio. (30). 1882. **B I**
- Leach, Miss Mary F., Mt. Holyoke College, South Hadley, Mass. (44). 1896. **C**
- LeConte, Prof. Joseph, University of California, Berkeley, Cal. (29). 1881. **E F**
- Ledoux, Albert R., Ph.D., 9 Cliff St., New York, N. Y. (26). 1881. **C**
- Lefavour, Prof. Henry, Williams College, Williamstown, Mass. (42). 1894.
- Lehmann, G. W., Ph.D., 412 E. Lombard St., Baltimore, Md. (30). 1885. **C B**
- Lennon, William H., Brockport, N. Y. (31). 1894. **G C**
- Lesley, Prof. J. Peter, P. O. Box 93, Milton, Mass. (2). 1874. **E**
- Leverett, Frank, Denmark, Iowa (37). 1891. **E**
- Libbey, Prof. William, Princeton, N. J. (29). 1887. **E F**
- Lindenköhl, Adolphus, U. S. Coast and Geodetic Survey, Washington, D. C. (40). 1898. **E**
- Lindenthal, Gustav, C.E., 45 Cedar St., New York, N. Y. (37). 1891. **I**
- Lloyd, John Uri, Pharmaceutical Chemist, Court and Plum Sts., Cincinnati, Ohio (38). 1890. **C F**
- Loeb, Morris, Ph.D., 118 West 72d St., New York, N. Y. (36). 1889. **C**
- Lord, Prof. Nat. W., State University, Columbus, Ohio (29). 1881. **C**
- LOUBAT, LE DUC DE, 47 rue Dumont d'Urville, Paris, France (46). 1897. **H**
- Loud, Prof. Frank H., 1203 N. Tejon St., Colorado Springs, Colo. (29). 1890. **A B**
- Loughridge, Dr. R. H., University of California, Berkeley, Cal. (21). 1874. **E C**
- Love, Edward G., 80 E. 55th St., New York, N. Y. (24). 1882. **C**
- Low, Seth, President Columbia University, New York, N. Y. (29). 1890.
- Lowell, Augustus, 53 State St., Boston, Mass. (29). 1898.
- Lowell, Percival, 53 State St., Boston, Mass. (36). 1896. **A**
- Ludlow, Lt. Col. William, Corps of Eng. U. S. A., Army Building, New York, N. Y. (33). 1897. **D B**
- Lyford, Edwin F., Springfield, Mass. (33). 1896. **B C H**
- Lyle, David A., Major U. S. A., Ordnance Office, Washington, D. C. (28). 1880. **D**

- Lyon, Dr. Henry, 34 Monument Sq., Charlestown, Mass. (18). 1874.
- McClintock, Emory, Morristown, N. J. (43). 1895. **A**
- McCreath, Andrew S., 223 Market St., Harrisburg, Pa. (33). 1889. **C E**
- McCurdy, Chas. W., Ph.D., University of Idaho, Moscow, Idaho (35). 1895. **F E**
- McDonnell, Prof. Henry B., College Park, Md. (40). 1893. **C**
- MacDougal, Daniel T., University of Minnesota, Minneapolis, Minn. (44). 1897. **G**
- McGee, Dr. Anita Newcomb, Bureau of American Ethnology, Washington, D. C. (37). 1892. **H**
- McGee, W J, Bureau of American Ethnology, Washington, D. C. (27). 1882. **H E**
- McGill, John T., Ph.D., Vanderbilt Univ., Nashville, Tenn. (36). 1888. **C**
- McGregory, Prof. J. F., Colgate Univ., Hamilton, N. Y. (35). 1892. **C**
- McMahon, James, Ithaca, N. Y. (36). 1891. **A**
- McMurtrie, William, 100 William St., New York, N. Y. (22). 1874. **C**
- McNeill, Malcolm, Lake Forest, Ill. (32). 1885. **A**
- McPherson, Prof. William, Ohio State Univ., Columbus, Ohio (45). 1898. **C**
- Mabery, Prof. C. F., Case School of Applied Science, Cleveland, Ohio (29). 1881. **C**
- Macbride, Prof. Thomas H., Iowa City, Iowa (38). 1890. **G**
- Macfarlane, Prof. A., Lehigh University, S. Bethlehem, Pa. (34). 1886. **B A**
- Macloskie, Prof. George, Princeton University, Princeton, N. J. (25). 1882. **F G**
- Magie, Prof. Wm. F., Princeton University, Princeton, N. J. (35). 1887.
- MANN, B. PICKMAN, 1918 Sunderland Place, Washington, D. C. (22). 1874. **I F**
- Marindin, Henry Louis, U. S. Coast and Geodetic Survey, Washington, D. C. (40). 1898. **E**
- Marlatt, Charles L., Department of Agriculture, Washington, D. C. (40). 1895. **F**
- Marsh, Prof. C. Dwight, Ripon, Wis. (34). 1893. **F E**
- Martin, Artemas, U. S. Coast Survey, Washington, D. C. (38). 1890. **A**
- Martin, Prof. Daniel S., 126 Macon St., Brooklyn, N. Y. (23). 1879. **E F**
- Marvin, C. F., U. S. Weather Bureau, Washington, D. C. (39). 1892. **B**
- Marvin, Frank O., University of Kansas, Lawrence, Kan. (35). 1894. **D**
- Mason, Dr. William P., Rensselaer Polytechnic Institute, Troy, N. Y. (31). 1886. **C**
- Matthews, Dr. Washington, 21 South Ingalls St., Ann Arbor, Mich. (37). 1888. **H**
- Meehan, Thomas, Germantown, Pa. (17). 1875. **G**
- Mees, Prof. Carl Leo, Rose Polytechnic Institute, Terre Haute, Ind. (24). 1876. **B C**
- Mell, Prof. P. H., Polytechnic Institute, Auburn, Ala. (39). 1895. **E G**

- Mendenhall, Prof. T. C., President Worcester Polytechnic Institute, Worcester, Mass. (20). 1874. **B**
- Mercer, H. C., Doylestown, Bucks Co., Pa. (41). 1893. **H**
- MERRILL, FREDERICK, J. H., Ph.D., Director New York State Museum, and State Geologist, Albany, N. Y. (35). 1887. **E**
- Merriman, C. C., 1910 Surf St., Lake View, Chicago, Ill. (29). 1880. **F**
- Merriman, Prof. Mansfield, S. Bethlehem, Pa. (32). 1885. **A D**
- Merritt, Ernest, Ithaca, N. Y. (33). 1890. **B**
- Metcalf, William, Pittsburg, Pa. (33). 1894. **D**
- Michael, Mrs. Helen Abbott, 44 Mt. Vernon St., Boston, Mass. (33). 1885. **C F**
- Miller, Prof. Arthur M., State College, Lexington, Ky. (45). 1898. **E**
- Miller, Prof. Dayton C., Case School of Applied Science, Cleveland, Ohio (44). 1898. **B**
- Miller, George A., 11 Cook St., Ithaca, N. Y. (46). 1898. **A**
- Miller, Prof. Wm. S., Univ. of Wisconsin, Madison, Wis. (42). 1894. **F**
- Mills, Prof. Wesley, McGill College, Montreal, Can. (31). 1886. **F H**
- Minot, Dr. Charles Sedgwick, Harvard Medical School, Back Bay, Boston, Mass. (28). 1880. **F**
- Minot, Francis, M.D., Readville, Mass. (29). 1884.
- Mohr, Dr. Charles, Mobile, Ala. (40). 1895. **G**
- Moler, Geo. S., 106 University Ave., Ithaca, N. Y. (38). 1892.
- Moody, Robert O., M.D., Fair Haven Heights, New Haven, Conn. (35). 1892. **F**
- Moore, Clarence B., 1321 Locust St., Philadelphia, Pa. (44). 1897. **H**
- Moore, Prof. J. W., M.D., Lafayette College, Easton, Pa. (22). 1874. **B D A**
- Moore, Prof. Willis L., Chief of Weather Bureau, Dep't Agriculture, Washington, D. C. (44). 1897. **B**
- Moorehead, Warren K., Xenia, Ohio (38). 1890. **H**
- Moreland, Prof. S. T., Lexington, Va. (33). 1894. **B D**
- Morley, Prof. Edward W., 23 Cutler St., Cleveland, Ohio (18). 1876. **C B E**
- Morse, Prof. E. S., Salem, Mass. (18). 1874. **F H**
- Morton, H., Stevens Institute Technology, Hoboken, N. J. (18). 1875. **B C**
- Moser, Lieut. Comd'r Jeff. F., U. S. N., Com'dg U. S. F. S. Str. Albattross, Navy Pay Office, San Francisco, Cal. (28). 1889. **E**
- Moses, Prof. Thomas F., Urbana University, Urbana, Ohio (25). 1883. **H F**
- MUNROE, PROF. C. E., Columbian Univ., Washington, D. C. (22). 1874. **C**
- Munsterberg, Hugo, Harvard University, Cambridge, Mass. (47). 1898.
- Murdoch, John, Public Library, Boston, Mass. (29). 1886. **F H**
- Myers, John A., Rooms 124 and 125, Anderson Building, 12-16 John St., New York, N. Y. (30). 1889. **C**
- Myers, William S., M.Sc., F.C.S., Rutgers College, New Brunswick, N. J. (43). 1898. **C**
- Nagle, Prof. James C., A. and M. College, College Station, Texas (40). 1893. **D B**

Nardroff, Ernest R. von, 360½ Tompkins Ave., Brooklyn, N. Y. (44). 1896.

B

Nef, J. U., University of Chicago, Chicago, Ill. (39). 1891. **C**

Nelson, Prof. A. B., Centre College, Danville, Ky. (30). 1882. **A B D**

Newcomb, Harry T., Division of Statistics, Department of Agriculture, Washington, D. C. (47). 1898.

Newcomb, Prof. S., Navy Dep't, Washington, D. C. (13). 1874. **A B**

Newcombe, Frederick Chas., 51 E. Liberty St., Ann Arbor, Mich. (43). 1896. **G**

Newell, William Wells, Editor Journal American Folk Lore, Cambridge, Mass. (41). 1893. **H**

Nichols, Ernest Fox, Hamilton, N. Y. (41). 1893. **B**

Nichols, E. L., Ph.D., Cornell University, Ithaca, N. Y. (28). 1881. **B C**

Niles, Prof. W. H., Cambridge, Mass. (16). 1874. **E**

Nipher, Prof. F. E., Washington University, St. Louis, Mo. (24). 1876.

B

Nolan, Edw. J., M.D., Academy of Natural Sciences, Philadelphia, Pa. (29). 1890. **F**

NORTON, PROF. THOMAS H., University of Cincinnati, Cincinnati, Ohio (35). 1887. **C**

Novy, Dr. Frederick G., University of Michigan, Ann Arbor, Mich. (36). 1889. **C**

Noyes, Prof. Arthur A., Massachusetts Institute Technology, Boston, Mass. (45). 1897. **C**

Noyes, Miss Mary C., Ph.D., Lake Erie College, Painesville, Ohio (43). 1896. **B**

Noyes, Prof. Wm. A., Rose Polytechnic Institute, Terre Haute, Ind. (32). 1885. **C**

Nuttall, Mrs. Zelia, care Messrs. Bassinger & Co., Bankers, Pragerstrasse, Dresden, Germany (35). 1887. **H**

Nutting, Prof. Charles C., State University of Iowa, Iowa City, Iowa (40). 1892. **F**

Oberholser, Harry Church, Division Biological Survey, Dep't Agriculture, Washington, D. C. (46). 1898. **F**

Ogden, Herbert G., U. S. C. and G. Survey, Washington, D. C. (38). 1891. **E**

Ordway, Prof. John M., Tulane University, New Orleans, La. (9). 1875. **C**

Orleman, Miss Daisy M., M.D., Peekskill Military Acad., Peekskill, N. Y. (40). 1897. **F**

Orr, William, Jr., 30 Firglade Ave., Springfield, Mass. (39). 1895. **F B**

Orton, Prof. Edward, Ohio State University, Columbus, Ohio (19). 1875.

E

Osborn, Henry F., Columbia University, New York, N. Y. (29). 1883. **F**

Osborn, Herbert, Ohio State University, Columbus, Ohio (32). 1884. **F**

Osmond, Prof. I. Thornton, State College, Centre Co., Pa. (33). 1889.

B A C

- Packard, Dr. A. S., 115 Angell St., Providence, R. I. (16). 1875. **F E**
 Paine, Cyrus F., 806 Granite Building, Rochester, N. Y. (12). 1874. **B A**
 Palache, Charles, University Museum, Cambridge, Mass. (44). 1896. **E**
 Palmer, Prof. Arthur William, Urbana, Ill. (46). 1898. **C**
 Pammel, Prof. L. H., Iowa Agricultural College, Ames, Iowa (39). 1892.

G

- PARKHURST, HENRY M., 173 Gates Ave., Brooklyn, N. Y. (23). 1874.

A

- Parks, C. Wellman, Civil Eng., U. S. N., care Bureau of Navigation.
 Washington, D. C. (42). 1897.
 Parsons, Prof. C. Lathrop, Durham, N. H. (41). 1896.
 Patterson, Geo. W., Jr., Ann Arbor, Mich. (44). 1896.
 Patterson, Harry J., College Park, Md. (36). 1890. **C**
 Paul, Prof. Henry M., U. S. Naval Observatory, Washington, D. C. (33).
 1885. **A B**

- Peet, Rev. Stephen D., 5327 Madison Ave., Chicago, Ill. (24). 1881.

H

- Peirce, Prof. Benjamin O., 51 Oxford St., Cambridge, Mass. (47). 1898.
 Peirce, George James, Stanford University, Cal. (44). 1897. **G**
 PENROSE, DR. R. A. F., Jr., Ph.D., 460 Bullitt Building, Philadelphia,
 Pa. (38). 1890. **E**

- Perkins, Prof. George H., Burlington, Vt. (17). 1882. **H F E**
 Perry, Arthur C., 226 Halsey St., Brooklyn, N. Y. (43). 1896. **A B**
 Peters, Edw. T., P. O. Box 265, Washington, D. C. (33). 1889. **I**
 Pettee, Prof. Wm. H., 554 Thompson St., Ann Arbor, Mich. (24). 1875.

E

- Phillips, Prof. A. W., New Haven, Conn. (24). 1879.
 Phillips, Prof. Francis C., Western University, Allegheny, Pa. (36). 1889.

C

- Phillips, Dr. Wm. A., Evanston, Ill. (41). 1895. **H**
 Pickering, Prof. E. C., Director of Harvard Observatory, Cambridge,
 Mass. (18). 1875. **A B**

- Pierce, Perry Benjamin, U. S. Patent Office, Washington, D. C. (40).
 1895. **H**

- Pillsbury, J. E., Lieut. U. S. N., care Dr. W. L. Richardson, 225 Com-
 monwealth Ave., Boston, Mass. (33). 1898. **E B**

- Pillsbury, Prof. John H., Waban, Mass. (23). 1885. **F H**

- Platt, Franklin, Ass't Geologist, 2nd Geological Survey of Pennsylvania,
 1820 Chestnut St., Philadelphia, Pa. (27). 1882. **E**

- Pohlman, Dr. Julius, Buffalo, N. Y. (32). 1884. **E F**

- Porter, Prof. James Madison, Lafayette College, Easton, Pa. (45). 1898. **D**

- Powell, Major J. W., Washington, D. C. (23). 1875. **E H**

- Power, Frederick B., Ph.D., care Messrs. Burroughs, Wellcome & Co., 42
 Snow Hill, London, E. C., England (31). 1887. **C**

- Prentiss, D. Webster, M.D., 1101 14th St., N. W., Washington, D. C. (29).
 1882. **F**

- Prescott, Prof. Albert B., Ann Arbor, Mich. (23). 1875. **C**

- Pritchett, Henry S., Sup't U. S. Coast and Geodetic Survey, Washington, D. C. (29). 1881. **A**
- Proctor, Miss Mary, 29 E. 46th St., New York, N. Y. (43). 1898. **A**
- Prosser, Charles S., Union College, Schenectady, N. Y. (33). 1891. **E F**
- Pulsifer, Wm. H., Newton Centre, Mass. (26). 1879. **A H**
- Pupin, Dr. M. I., Columbia University, New York, N. Y. (44). 1896. **B**
- Putnam, Prof. F. W., Curator Peabody Museum American Archæology and Ethnology, Cambridge, Mass.; Curator Dept. Anthropology, Amer. Museum Nat. History, Central Park, New York, N. Y. (10). 1874. **H**
- Rathbun, Richard, Smithsonian Institution, Washington, D. C. (40). 1892. **F**
- Raymond, Rossiter W., 13 Burling Slip, New York, N. Y. (15). 1875. **E I**
- Rees, Prof. John K., Columbia Univ., New York, N. Y. (26). 1878. **A E B**
- Reese, Charles L., 1801 Linden Ave., Baltimore, Md. (39). 1892. **C**
- Reese, Jacob, 400 Chestnut St., Philadelphia, Pa. (33). 1891. **D B**
- Reid, Harry Fielding, Johns Hopkins Univ., Baltimore, Md. (36). 1893. **B**
- Remsen, Prof. Ira, Johns Hopkins Univ., Baltimore, Md. (22). 1875. **C**
- Reuter, Dr. Ludwig, Chief Chemist of Merck & Co., Merck Building, University Place, New York, N. Y. (46). 1898. **C**
- Rice, Prof. Wm. North, Wesleyan University, Middletown, Conn. (18). 1874. **E F**
- Richards, Prof. Charles B., 137 Edwards St., New Haven, Conn. (33). 1885. **D**
- RICHARDS, EDGAR, 341 W. 88th St., New York, N. Y. (31). 1886. **C**
- Richards, Prof. Robert H., Massachusetts Institute of Technology, Boston, Mass. (22). 1875. **D**
- Richards, Msr. Robert H., Massachusetts Institute of Technology, Boston, Mass. (23). 1878. **C**
- Richardson, Clifford, Sup't of Tests, Barber Asphalt Paving Co., Long Island City, N. Y. (30). 1884. **C**
- Ries, Heinrich, Ph.B., Columbia University, New York, N. Y. (41). 1898. **E**
- Ricketts, Prof. Palmer C., 17 1st St., Troy, N. Y. (33). 1887. **D A**
- Ricketts, Prof. Pierre de Peyster, 104 John St., New York, N. Y. (26). 1880. **C D E**
- Ripley, William Z., Ph.D., Newton Centre, Mass. (44). 1897. **H I**
- Robinson, Benjamin Lincoln, Curator Harvard Herbarium, Cambridge, Mass. (41). 1893. **G**
- Robinson, Prof. Franklin C., Bowdoin College, Brunswick, Me. (29). 1889. **C D**
- Robinson, Prof. S. W., 1353 Highland St., Columbus, Ohio (30). 1883. **D B A**
- Rockwell, Gen. Alfred P., Manchester, Mass. (10). 1882. **E**
- Rockwell, Chas. H., Box 293, Tarrytown, N. Y. (28). 1883. **A D**
- Rockwood, Prof. Charles G., Jr., Princeton College, Princeton, N. J. (20). 1874. **A E B D**
- Rominger, Dr. Carl, Ann Arbor, Mich. (21). 1879. **E**

Rood, Prof. O. N., Columbia University, New York, N. Y. (14). 1875.

B

Rosa, Edward Bennett, Wesleyan University, Middletown, Conn. (39).

1892. **A B**

Ross, Waldo O., 1 Chestnut St., Boston, Mass. (29). 1882.

Rotch, A. Lawrence, Director of Blue Hill Meteorological Observatory, Hyde Park, Mass. (39). 1896. **B**

Rowland, Prof. Henry A., Baltimore, Md. (29). 1880. **B**

Rowlee, W. W., Cornell University, Ithaca, N. Y. (41). 1894. **G**

Runkle, Prof. J. D., Massachusetts Institute of Technology, Boston, Mass. (2). 1875. **A D**

Rusby, Henry H., M.D., College of Pharmacy, 211 E. 23d St., New York, N. Y. (36). 1890. **G**

Russell Prof. H. L., University of Wisconsin, Madison, Wis. (41). 1894. **G**

Russell, I. C., University of Mich., Ann Arbor, Mich. (25). 1882. **E**

Ryan, Harris J., Cornell University, Ithaca, N. Y. (38). 1890. **B**

Safford, Dr. James M., Nashville, Tenn. (6). 1875. **E C F**

Safford, Prof. Truman H., Williamstown, Mass. (41). 1892. **A**

Salisbury, Prof. R. D., Chicago University, Chicago, Ill. (37). 1890. **B E**

Saunders, William, LL.D., F.R.S.C., F.L.S., Director Canadian Experimental Farms, Ottawa, Can. (17). 1874. **F**

Saville, Marshall H., American Museum Natural History, Central Park, New York, N. Y. (39). 1892. **H**

SCHAEBERLE, J. M., Lick Observatory, San José, Cal. (34). 1886. **A**

Schott, Charles A., U. S. Coast and Geodetic Survey, Washington, D. C. (8). 1874. **A**

Schwarz, E. A., 230 New Jersey Ave., Washington, D. C. (29). 1895. **F**

Schweinitz, Dr. E. A. de, Department of Agriculture, Washington, D. C. (36). 1889. **C**

Schweitzer, Prof. Paul, State University of Missouri, Columbia, Mo. (24). 1877. **C B**

SCUDDER, SAMUEL H., Cambridge, Mass. (13). 1874. **F**

Scully, Miss S. A., Smethport, McKean Co., Pa. (40). 1895. **H**

Seaman, W. H., Chemist, 1424 11th St., N. W., Washington, D. C. (23). 1874. **C F**

Sedgwick, Prof. William Thompson, Mass. Institute Technology, Boston, Mass. (47). 1898. **F G**

See, Horace, 1 Broadway, New York, N. Y. (34). 1886. **D**

Seymour, Arthur Bliss, Cambridge, Mass. (36). 1890. **G**

Seymour, Paul Henry, 479 Second Ave., Detroit, Mich. (44). 1896. **C**

Sharp, Dr. Clayton H., Ithaca, N. Y. (45). 1897.

Sharples, Stephen P., 13 Broad St., Boston, Mass. (29). 1884. **C**

Shaw, Prof. James Byrnie, 1030 Grove St., Jacksonville, Ill. (43). 1896. **A**

Sheldon, Samuel, A.M., Ph.D., Polytechnic Institute, Brooklyn, N. Y. (42). 1894. **B**

- Shimer, Porter W., E.M., Ph.D., Easton, Pa. (38). 1889. **C**
 Shufeldt, Dr. R. W., Takoma Park, D. C. (40). 1892. **F**
 Shutt, Frank T., M.A., F.E.C., F.C.S., Canadian Experimental Farms, Ottawa, Can. (47). 1898. **C**
 Sias, Solomon, M.D., Schoharie, Schoharie Co., N. Y. (10). 1874.
 Simon, Dr. Wm., 1348 Block St., Baltimore, Md. (29). 1895. **C**
 Simonds, Prof. Frederic W., University of Texas, Austin, Texas. (25). 1888. **E F**
 Skilton, James A., 115 Broadway, New York, N. Y. (43). 1895. **I**
 Skinner, Aaron N., U. S. Naval Observatory, Washington, D. C. (40). 1893. **A**
 Smith, Alex., Ph.D., University of Chicago, Chicago, Ill. (40). 1892. **C**
 Smith, Prof. Edgar F., University of Pennsylvania, Philadelphia, Pa. (33). 1891. **C**
 Smith, Prof. Erastus G., Beloit College, Beloit, Wis. (34). 1887. **C**
 Smith, Ernest Ellsworth, 262 Fifth Ave., New York, N. Y. (43). 1898.
 Smith, Erwin F., Department of Agriculture, Washington, D. C. (34). 1890. **G**
 Smith, Prof. Eugene A., University, Ala. (20). 1877. **E C**
 Smith, Harlan I., American Museum Natural History, Central Park, New York, N. Y. (41). 1896. **H**
 Smith, Prof. Harold B., Polytechnic Inst., Worcester, Mass. (43). 1898. **D**
 Smith, John B., Rutgers College, New Brunswick, N. J. (32). 1884. **F**
 SMITH, QUINTIUS C., M.D., 617 Colorado St., Austin, Texas. (26). 1881. **F**
 Smock, Prof. John Conover, Trenton, N. J. (23). 1879. **E**
 Smyth, C. H., Jr., Clinton, N. Y. (38). 1894. **E**
 Snow, Prof. F. H., Lawrence, Kan. (29.) 1881. **F E**
 Snyder, Prof. Harry, 2090 Dooley Ave., Saint Anthony Park, Minn. (44). 1897. **C**
 Snyder, Prof. Monroe B., High School Observatory, Philadelphia, Pa. (24). 1882. **A B**
 Soule, R. H., Baldwin Locomotive Works, 1217 Monadnock Building, Chicago, Ill. (33). 1886. **D**
 Spencer, Prof. J. William, 1710 Q St., Washington, D. C. (28). 1882. **E**
 SPENZER, JOHN G., M.D., 370 Central Avenue, Cleveland, Ohio. (37). 1895. **C**
 Spinney, L. B., Iowa State College, Ames, Iowa. (42). 1897. **B**
 Springer, Dr. Alfred, Box 621, Cincinnati, Ohio. (24). 1880. **C**
 Squibb, Edward R., M.D., 152 Columbia Heights, Brooklyn, N. Y. (43). 1896.
 Starr, Frederick, Ph.D., Prof. University of Chicago, Chicago, Ill. (36). 1892. **H E**
 Stearns, Robert E. C., Ph.D., 1025 East Eighteenth St., Los Angeles, Cal. (18). 1874. **F**

- Steinmetz, Chas. Proteus, General Electric Co., Schenectady, N. Y. (40). 1895. **B**
- STEPHENS, W. HUDSON, Lowville, N. Y. (18). 1874. **E H**
- Sternberg, George M., M.D., LL.D., Surgeon-General U. S. A., War Department, Washington, D. C. (24). 1880. **F**
- Stevens, Prof. W. LeConte, Washington and Lee Univ., Lexington, Va. (29). 1882. **B**
- Stevenson, Mrs. Cornelius, 237 S. 21st St., Philadelphia, Pa. (33). 1895. **H**
- Stevenson, Prof. John J., Univ. Heights, New York, N. Y. (36). 1888. **E**
- Stevenson, Mrs. Matilda C., Bureau of Ethnology, Washington, D. C. (41). 1893. **H**
- Stockwell, John N., 1008 Case Ave., Cleveland, O. (18). 1875. **A**
- Stokes, Henry Newlin, Ph.D., U. S. Geological Survey, Washington, D. C. (38). 1891. **C E**
- Stone, Ormond, Director Leander McCormick Observatory, University of Virginia, Va. (24). 1876. **A**
- Story, Prof. Wm. E., Clark University, Worcester, Mass. (29). 1881. **A**
- Stowell, Prof. T. B., Potsdam, N. Y. (28). 1885. **F**
- Stuart, Prof. A. P. S., Lincoln, Nebraska (21). 1874. **C**
- Sturgis, Wm. C., 384 Whitney Ave., New Haven, Conn. (40). 1892. **G**
- Swingle, Walter T., Department of Agriculture, Washington, D. C. (40). 1892. **G**
- Tainter, Charles Sumner, 1843 S St., N. W., Washington, D. C. (29). 1881. **B D A**
- Talbot, Henry P., Massachusetts Institute of Technology, Boston, Mass. (44). 1896. **C**
- Taylor, Frank B., 391 Fairfield Ave., Fort Wayne, Ind. (39). 1897.
- Tesla, Nikola, LL.D., 55 W. 27th St., New York, N. Y. (43). 1895. **B**
- Thomas, Benjamin F., State University, Columbus, Ohio. (29). 1882. **B A**
- Thomas, Prof. M. B., Crawfordsville, Ind. (41). 1894. **G**
- Thompson, Joseph Osgood, Amherst, Mass. (41). 1893.
- Thomson, Elihu, Thomson-Houston Electric Co., Lynn, Mass. (37). 1888. **B**
- Thomson, Wm., M.D., 1426 Walnut St., Philadelphia, Pa. (33). 1885. **B**
- Thornburg, Charles L., Lehigh University, S. Bethlehem, Pa. (44). 1897. **A**
- Thruston, Gates Phillips, Nashville, Tenn. (38). 1890. **H**
- Thruston, R. C. Ballard, care Ballard & Ballard Co., Louisville, Ky. (36). 1896. **E**
- Thurston, Prof. R. H., Sibley College, Cornell University, Ithaca, N. Y. (23). 1875. **D**
- Tittmann, Otto H., U. S. Coast and Geodetic Survey, Washington, D. C. (24). 1888. **A**
- Todd, Prof. David P., Director Lawrence Observatory, Amherst College, Amherst, Mass. (27). 1881. **A B D**

- Todd, Prof. James E., Box 22, Vermilion, S. Dak. (22). 1886. **E F**
- Tooker, William Wallace, Sag Harbor, N. Y. (43). 1895. **H**
- Traphagen, Frank W., Ph.D., Bozeman, Montana. (35). 1889. **C F E**
- Trelease, Dr. Wm., Director Missouri Botanical Gardens, St. Louis, Mo. (39). 1891. **G**
- Trenholm, Hon. W. L., President American Surety Co., 160 Broadway, New York, N. Y. (35). 1896.
- True, Fred W., National Museum, Washington, D. C. (28). 1882. **F**
- Tucker, Willis G., M.D., Albany Medical College, Albany, N. Y. (29). 1888. **C**
- TUCKERMAN, ALFRED, Ph.D., 342 W. 57th St., New York, N. Y. (39). 1891. **C**
- Tuttle, Prof. Albert H., University of Virginia, Charlottesville, Va. (17). 1874. **F**
- Twitchell, E., 720 Greenwood Ave., Avondale, Cincinnati, Ohio. (39). 1891. **C**
- Uhler, Philip R., 254 W. Hoffman St., Baltimore, Md. (19). 1874. **F E**
- Underwood, Lucien M., Prof. of Botany, Columbia University, New York, N. Y. (33). 1885. **G**
- Upham, Warren, Librarian of the Minnesota Historical Society, St. Paul, Minn. (25). 1880. **E**
- Upton, Winslow, Brown University, Providence, R. I. (29). 1883. **A**
- Van Dyck, Prof. Francis Cuyler, New Brunswick, N. J. (28). 1882. **B C F**
- Van Hise, Charles R., University of Wisconsin, Madison, Wis. (37). 1890.
- Van Vleck, Prof. John M., Wesleyan University, Middletown, Conn. (23). 1875. **A**
- Veeder, Major Albert, M.D., Lyons, Wayne Co., N. Y. (36). 1895.
- Venable, Prof. F. P., Chapel Hill, N. C. (39). 1891. **C**
- Verrill, Prof. A. E., New Haven, Conn. (47). 1898. **F**
- Vogdes, A. W., Captain 5th Artillery, Fort Mason, San Francisco, Cal. (32). 1885. **E F**
- Voorhees, Louis A., P. O. Box 290, New Brunswick, N. J. (43). 1895. **C**
- Wagner, Frank C., Rose Polytechnic Institute, Terre Haute, Ind. (34). 1897. **D**
- Waite, M. B., Dep't of Agriculture, Washington, D. C. (37). 1893. **G**
- Walcott, Charles D., Director U. S. Geological Survey, Washington, D. C. (25). 1882. **E F**
- Waldo, Prof. Clarence A., Purdue University, Lafayette, Ind. (37). 1889. **A**
- Waldo, Leonard, S. D., 57 Coleman St., Bridgeport, Conn. (28). 1880. **A**
- WALLER, E., School of Mines, Columbia University, New York, N. Y. (23). 1874.
- Ward, Prof. Henry A., 620 Division St., Chicago, Ill. (13). 1875. **F E H**
- Ward, Lester F., U. S. Geological Survey, Washington, D. C. (26). 1879. **E G**
- Ward, Dr. R. H., 53 Fourth St., Troy, N. Y. (17). 1874. **G F**

- Ward, Wm. E., Port Chester, N. Y. (36). 1889. **D**
- Warder, Prof. Robert B., Howard University, Washington, D. C. (19). 1881. **C B**
- WARNER, JAMES D., 463 E. 26th St., Flatbush, Brooklyn, N. Y. (18). 1874. **A B**
- Warner, Worcester R., 1722 Euclid Ave., Cleveland, Ohio (33). 1888. **A B D**
- Warren, Dr. Joseph W., Bryn Mawr Coll., Bryn Mawr, Pa. (31). 1886. **F**
- Warren, Prof. S. Edward, Newton, Mass. (17). 1875. **A I**
- Washington, Dr. Henry S., Locust, N. J. (44). 1897. **E**
- WATSON, PROF. WM., 107 Marlborough St., Boston, Mass. (12). 1884. **A**
- Wead, Charles K., Patent Office, Washington, D. C. (47). 1898. **B**
- Weber, Prof. Henry A., Ohio State Univ., Columbus, Ohio (35). 1888. **F**
- Webster, F. M., Wooster, Ohio (35). 1890. **F**
- Webster, Prof. N. B., Vineland, N. J. (7). 1874. **B C E**
- Weed, Clarence M., Durham, N. H. (38). 1890. **F**
- WEST, DR. CHARLES E., Brooklyn, N. Y. (1). 1895.
- Weston, Edward, 645 High St., Newark, N. J. (33). 1887. **B C D**
- White, David, U. S. Geological Survey, Washington, D. C. (40). 1892. **E F**
- White, Prof. H. C., University of Georgia, Athens, Ga. (29). 1885. **C**
- WHITE, PROF. I. C., State Geologist of West Virginia, Morgantown, W. Va. (25). 1882. **E**
- Whiteaves, J. F., Geological Survey, Ottawa, Can. (31). 1887. **E F**
- Whitfield, J. Edward, 406 Locust St., Philadelphia, Pa. (44). 1896. **C**
- Whitfield, R. P., American Museum Natural History, Central Park, New York, N. Y. (18). 1874. **E F H**
- Whiting, Miss Sarah F., Wellesley College, Wellesley, Mass. (31). 1883. **B A**
- Whitman, Prof. Charles O., Chicago University, Chicago, Ill. (43). 1898. **F**
- Whitman, Prof. Frank P., Adelbert College, Cleveland, Ohio (33). 1885. **A B**
- Wilbur, A. B., Middletown, N. Y. (23). 1874. **E**
- Wiley, Prof. Harvey W., Department of Agriculture, Washington, D. C. (21). 1874. **C**
- Williams, Benezette, 171 La Salle St., Chicago, Ill. (33). 1887. **D**
- Williams, Charles H., M.D., 15 Arlington St., Boston, Mass. (22). 1874.
- Williams, Prof. Edw. H., Jr., 117 Church St., Bethlehem, Pa. (25). 1894. **E D**
- Williams, Francis H., M.D., 505 Beacon St., Boston, Mass. (29). 1890.
- Williams, Prof. Henry Shaler, Yale University, New Haven, Conn. (18). 1882. **E F**
- Willis, Bailey, U. S. Geological Survey, Washington, D. C. (36). 1890.
- Willoughby, Charles C., Peabody Museum, Cambridge, Mass. (45). 1897. **H**

- Willson, Prof. Frederick N., Princeton, N. J. (33). 1887. **A D**
- Willson, Robert W., Cambridge, Mass. (30). 1890. **B A**
- Wilson, Joseph M., Room 1030 Drexel Building, Philadelphia, Pa. (33). 1886. **D**
- Wilson, Robert N., Macleod, Alberta, Can. (42). 1895. **H**
- Wilson, Thomas, National Museum, Washington, D. C. (36). 1888. **H**
- Wilson, Prof. William Powell, Director, Philadelphia Museums, 233 S. Fourth St., Philadelphia, Pa. (38). 1889. **G**
- Winchell, Horace V., Butte, Montana. (34). 1890. **E C**
- Winchell, Prof. N. H., University of Minnesota, Minneapolis, Minn. (19). 1874. **E H**
- Winterhalter, A. G., Lt. U. S. N., League Island, Navy Yard, Philadelphia, Pa. (37). 1893. **A**
- Withers, Prof. W. A., Agricultural and Mechanical College, Raleigh, N. C. (33). 1891. **C**
- Whitthaus, Dr. R. A., 414 East 26th St., New York, N. Y. (35). 1890.
- Wolff, Dr. J. E., 15 Story St., Cambridge, Mass. (36). 1894. **E**
- Woll, Fritz Wilhelm, Madison, Wis. (42). 1897. **C**
- Woodbury, C. J. H., Amer. Bell Telephone Co., 125 Milk St., Boston, Mass. (29). 1884. **D**
- Woodman, Dr. Durand, 80 Beaver St., New York, N. Y. (41). 1896.
- Woods, Albert F., Dep't of Agriculture, Washington, D. C. (43). 1897. **G**
- Woodward, Prof. Calvin M., 1761 Missouri Ave., St. Louis, Mo. (32). 1884. **D A I**
- Woodward, R. S., Columbia University, New York, N. Y. (33). 1885. **A B D**
- Woodworth, William McMichael, Ph.D., 149 Brattle St., Cambridge, Mass. (44). 1898. **F**
- Wright, Prof. Albert A., Oberlin College, Oberlin, Ohio. (24). 1880. **E F**
- Wright, Prof. Arthur W., Yale University, New Haven, Conn. (14). 1874. **A B**
- Wright, Carroll D., LL.D., Department of Labor, Washington, D. C. 1894. **I**
- Wright, Rev. Geo. F., Oberlin College, Oberlin, Ohio. (29). 1882. **E H**
- Würtele, Rev. Louis C., Acton Vale, P. Q. Can. (11). 1875. **E**
- Youmans, Wm. Jay, M.D., Popular Science Monthly, 72 Fifth Avenue, New York, N. Y. (28). 1889. **F C**
- Young, A. V. E., Northwestern University, Evanston, Ill. (33). 1886. **C B**
- Young, C. A., Princeton University, Princeton, N. J. (18). 1874. **A B D**
- Zalinski, E. L., U. S. A., Century Club, 7 W. 43d St., New York, N. Y. (36). 1891. **D**
- Ziwet, Alexander, 44 Madison St., Ann Arbor, Mich. (38). 1890. **A**

PROCEEDINGS

OF THE

American Association for the Advancement of Science

8 VO. PAPER. WITH NUMEROUS ILLUSTRATIONS.

Vol.	I.—Philadelphia	Meeting	1848,	pages	156,	published	1849.
	II.—Cambridge	"	1849,	"	479,	"	1850.
	III.—Charleston	"	1850,	"	239,	"	1850.
	IV.—New Haven	"	1850,	"	449,	"	1851.
	V.—Cincinnati	"	1851,	"	287,	"	1851.
	VI.—Albany	"	1851,	"	480,	"	1852.
	VII.—Cleveland	"	1853,	"	312,	"	1856.
	VIII.—Washington	"	1854,	"	372,	"	1855.
	IX.—Providence	"	1855,	"	357,	"	1856.
	X.—2nd Albany	"	1856,	"	547,	"	1857.
	XI.—Montreal	"	1857,	"	447,	"	1858.
	XII.—Baltimore	"	1858,	"	376,	"	1859.
	XIII.—Springfield	"	1859,	"	444,	"	1860.
	XIV.—Newport	"	1860,	"	328,	"	1861.
	XV.—Buffalo	"	1866,	"	174,	"	1867.
	XVI.—Burlington	"	1867,	"	218,	"	1868.
	XVII.—Chicago	"	1868,	"	410,	"	1869.
	XVIII.—Salem	"	1869,	"	352,	"	1870.
	XIX.—Troy	"	1870,	"	427,	"	1871.
	XX.—Indianapolis	"	1871,	"	491,	"	1872.
	XXI.—Dubuque	"	1872,	"	339,	"	1873.
	XXII.—Portland	"	1873,	"	669,	"	1874.
	XXIII.—Hartford	"	1874,	"	378,	"	1875.
	XXIV.—Detroit	"	1875,	"	541,	"	1876.
	XXV.—2nd Buffalo	"	1876,	"	424,	"	1877.
	XXVI.—Nashville	"	1877,	"	456,	"	1878.
	XXVII.—St. Louis	"	1878,	"	424,	"	1879.
	XXVIII.—Saratoga	"	1879,	"	636,	"	1880.
	XXIX.—Boston	"	1880,	"	875,	"	1881.
	XXX.—2nd Cincinnati	"	1881,	"	504,	"	1882.
	XXXI.—2nd Montreal	"	1882,	"	743,	"	1883.
	XXXII.—Minneapolis	"	1883,	"	598,	"	1884.
	XXXIII.—2nd Philadelphia	"	1884,	"	831,	"	1885.
	XXXIV.—Ann Arbor	"	1885,	"	662,	"	1886.
	XXXV.—3rd Buffalo	"	1886,	"	486,	"	1887.
	XXXVI.—New York	"	1887,	"	466,	"	1888.
	XXXVII.—2nd Cleveland	"	1888,	"	536,	"	1889.
	XXXVIII.—Toronto	"	1889,	"	600,	"	1890.
	XXXIX.—2nd Indianapolis	"	1890,	"	597,	"	1891.
	XL.—2nd Washington	"	1891,	"	585,	"	1892.
	XLI.—Rochester	"	1892,	"	496,	"	1893.
	XLII.—Madison	"	1893,	"	500,	"	1894.
	XLIII.—Brooklyn	"	1894,	"	599,	"	1895.
	XLIV.—2nd Springfield	"	1895,	"	534,	"	1896.
	XLV.—4th Buffalo	"	1896,	"	353,	"	1897.
	XLVI.—2nd Detroit	"	1897,	"	579,	"	1898.
	XLVII.—2nd Boston	"	1898,	"	744,	"	1898.

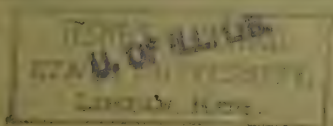
Price of the Proceedings \$1.50 a Volume, or to Members ordering ten or more Volumes at one time, \$1.00.

Orders will be received for any of the above volumes of Proceedings, bound in full cloth, at 50 cents extra per volume; or in half brown morocco, at \$1.00 extra per volume. Uniform Cloth Covers for the Proceedings, by mail, 30 cents each; or 25 cents by express.

Address, C. A. WATSON, Assistant Secretary,
NORTH ANDOVER, MASS.

506
AMA
1902

CONSTITUTION
LIST OF MEETINGS
OFFICERS
COMMITTEES AND MEMBERS
OF
The American Association
FOR THE
ADVANCEMENT OF SCIENCE,
FOR THE FIFTY-FIRST MEETING
HELD AT
PITTSBURG, PA.
JUNE-JULY, 1902.
PUBLISHED BY THE PERMANENT SECRETARY
1902
(CORRECTED TO JUNE 2, 1902.)



CONSTITUTION

LIST OF MEETINGS

OFFICERS

COMMITTEES AND MEMBERS

OF

The American Association

FOR THE

ADVANCEMENT OF SCIENCE,

FOR THE FIFTY-FIRST MEETING

HELD AT

PITTSBURG, PA.

JUNE-JULY, 1902.

PUBLISHED BY THE PERMANENT SECRETARY

1902

EDITED BY
L. O. HOWARD,
Permanent Secretary.

WASHINGTON, D. C.
GIBSON BROS., PRINTERS AND BOOKBINDERS,
1902.

506
AMA
1902

Officers Elected for the Pittsburg Meeting.

PRESIDENT.

ASAPH HALL, U. S. N., South Norwalk, Conn.

VICE-PRESIDENTS.

- A. **Mathematics and Astronomy**—G. W. HOUGH, Northwestern University, Evanston, Ill.
- B. **Physics**—W. S. FRANKLIN, Lehigh University, South Bethlehem, Pa.
- C. **Chemistry**—H. A. WEBER, Ohio State University, Columbus, Ohio.
- D. **Mechanical Science and Engineering**—J. J. FLATHER, University of Minnesota, Minneapolis, Minn.
- E. **Geology and Geography**—O. A. DERBY, Sao Paulo, Brazil.
- F. **Zoology**—C. C. NUTTING, Iowa State University, Iowa City, Iowa.
- G. **Botany**—D. H. CAMPBELL, Stanford University, Cal.
- H. **Anthropology**—STEWART CULIN, University of Pennsylvania, Philadelphia, Pa.
- I. **Social and Economic Science**—CARROLL D. WRIGHT, Commissioner of Labor, Washington, D. C.
- K. **Physiology and Experimental Medicine**—W. H. WELCH, Johns Hopkins University, Baltimore, Md.

PERMANENT SECRETARY.

L. O. HOWARD, Cosmos Club, Washington, D. C.

GENERAL SECRETARY.

D. T. MACDOUGAL, New York Botanical Gardens, Bronx Park, New York, N. Y.

SECRETARY OF THE COUNCIL.

H. B. WARD, University of Nebraska, Lincoln, Neb.

SECRETARIES OF THE SECTIONS.

- A. E. S. CRAWLEY, University of Pennsylvania, Philadelphia, Pa.

OFFICERS FOR THE PITTSBURG MEETING.

- B. E. F. NICHOLS, Dartmouth College, Hanover, N. H.
- C. F. C. PHILLIPS, Western University, Allegheny, Pa.
- D. C. A. WALDO, Purdue University, Lafayette, Ind.
- E. F. P. GULLIVER, St. Mark's School, Southboro, Mass.
- F. C. W. STILES, U. S. Dept. of Agriculture, Washington, D. C.
- G. H. VON SCHRENK, Shaw School of Botany, St. Louis, Mo.
- H. HARLAN I. SMITH, American Museum of Natural History, New York.
- I. F. R. RUTTER, U. S. Dept. of Agriculture, Washington, D. C.
- K. F. S. LEE, Columbia University, New York, N. Y.

TREASURER.

R. S. WOODWARD, Columbia University, New York, N. Y.

ASSISTANT SECRETARY.

RICHARD S. CLIFTON, Washington, D. C.

Members of the Council for the Pittsburg Meeting.

Past Presidents.—SIMON NEWCOMB, Washington; GEORGE F. BARKER, Philadelphia; GEORGE J. BRUSH, New Haven; C. A. YOUNG, Princeton; J. P. LESLEY, Milton; EDWARD S. MORSE, Salem; SAMUEL P. LANGLEY, Washington; J. W. POWELL, Washington; T. C. MENDENHALL, Worcester; GEORGE L. GOODALE, Cambridge; ALBERT B. PRESCOTT, Ann Arbor; WILLIAM HARKNESS, Washington; EDWARD W. MORLEY, Cleveland; THEODORE GILL, Washington; WOLCOTT GIBBS, Newport; F. W. PUTNAM, Cambridge; G. K. GILBERT, Washington; R. S. WOODWARD, New York; C. S. MINOT, Cambridge.

Vice-Presidents of the New York Meeting.—ASAPH HALL, JR., Ann Arbor; ERNEST MERRITT, Ithaca; JAMES LEWIS HOWE, Lexington; JOHN A. BRASHEAR, Allegheny; JAMES FURMAN KEMP, New York; C. B. DAVENPORT, Chicago; WM. TRELEASE, St. Louis; AMOS W. BUTLER, Indianapolis; CALVIN M. WOODWARD, St. Louis.

Vice-Presidents of the Denver Meeting.—JAMES MCMAHON, Ithaca; D. B. BRACE, Lincoln; JOHN H. LONG, Chicago; H. S. JACOBY, Ithaca; C. R. VAN HISE, Madison; D. S. JORDAN, Stanford University; B. T. GALLOWAY, Washington; J. WALTER FEWKES, Washington; JOHN HYDE, Washington.

Officers for the Pittsburg Meeting.—ASAPH HALL, Cambridge; G. W. HOUGH, Evanston; W. S. FRANKLIN, South Bethlehem; H. A. WEBER, Columbus; J. J. FLATHER, Minneapolis; O. A. DERBY, Sao Paulo; C. C. NUTTING, Iowa City; D. H. CAMPBELL, Stanford University; STEWART CULIN, Philadelphia; CARROLL D. WRIGHT, Washington; W. H. WELCH, Baltimore; L. O. HOWARD, Washington; D. T. MACDOUGAL, New York; H. B. WARD, Lincoln; E. S. CRAWLEY, Philadelphia; E. F. NICHOLS, Hanover; F. C. PHILLIPS, Allegheny; C. A. WALDO, Lafayette; F. P. GULLIVER, Southboro; C. W. STILES, Washington; H. VON SCHRENK, St. Louis; H. I. SMITH, New York; F. R. RUTTER, Washington; F. S. LEE, New York.

From the Association at Large.—To hold over until successors are elected. A fellow from each section: G. B. HALSTED, Austin; E. L. NICHOLS, Ithaca; C. S. PALMER, Boulder; T. C. CHAMBERLIN, Chicago; F. M. WEBSTER, Wooster; L. M. UNDERWOOD, Stanford; W. J. MCGEE, Washington; E. T. PETERS, Washington; J. McK. CATTELL, New York.

From the Affiliated Societies.—American Chemical Society: F. W. CLARKE, A. C. HALE; Geological Society of America: N. H. WINCHELL, H. L. FAIRCHILD; Botanical Society of America: C. E. BESSEY, B. D. HALSTED; Society for the Promotion of Agricultural Science: W. J. BEAL, C. P. GILLETTE; American Microscopical Society: J. C. SMITH, A. M. HOLMES; American Psychological Association: E. C. SANFORD.

Local Committees for the Pittsburg Meeting.*

HONORARY PRESIDENT.

GEORGE WESTINGHOUSE, Jr.

HONORARY VICE-PRESIDENTS.

(See Preliminary Announcement.)

EXECUTIVE COMMITTEE.

W. J. HOLLAND, Chairman.

EMIL SWENSSON, Vice-Chairman.

GEORGE A. WARDLAW, Secretary.

JOHN B. JACKSON, Treasurer.

FINANCE COMMITTEE.

JOHN B. JACKSON, Chairman and Treasurer.

H. KIRKE PORTER, Vice-Chairman.

COMMITTEE FOR THE RECEPTION AND ENTERTAINMENT OF VISITING LADIES.

Miss JULIA MORGAN HARDING, Chairman.

Miss MARY L. JACKSON, Vice-Chairman.

RECEPTION AND ENTERTAINMENT COMMITTEE.

W. N. FREW, Chairman.

GEORGE A. MACBETH, Vice-Chairman.

COMMITTEE ON ACCOMMODATIONS, HOTELS, &c.

R. D. MCGONNIGLE, Chairman.

W. J. DIEHL, Vice-Chairman.

COMMITTEE ON ROOM, HALLS AND EQUIPMENT.

C. R. CUNNINGHAM, Chairman.

COMMITTEE ON EXCURSIONS.

CHARLES F. SCOTT, Chairman.

E. B. TAYLOR, Vice-Chairman.

* For full membership of local committee, see the Preliminary Announcement of the Pittsburg meeting.

LOCAL COMMITTEES FOR THE PITTSBURG MEETING.

COMMITTEE ON TRANSPORTATION.

SAMUEL MOODY, Chairman.

SAMUEL MOODY—A. G. P. A., Pennsylvania Lines.

L. A. ROBINSON—G. P. A., P. & L. E. R.R.

E. D. SMITH—D. P. A., B. & O. R.R.

C. W. BASSETT—A. G. P. A., P. & W. R.R.

JAMES P. ANDERSON—Buffalo Division, P. R.R.

THOS. E. WATT—D. P. A., P. R.R.

C. O'D. PASCAULT—D. P. A., B. R. P. R.R.

COMMITTEE ON PRESS AND PRINTING.

Rev. P. A. McDERMOTT, Chairman.

GEORGE H. WILSON, Vice-Chairman.

GEORGE A. WARDLAW, Secretary.

Special Committees of the Association.¹

1. *Auditors.*

EMORY MCCLINTOCK, Morristown, and G. K. GILBERT, Washington.

2. *Committee on Indexing Chemical Literature.*

H. CARRINGTON BOLTON, *Chairman*, F. W. CLARKE, A. R. LEEDS, H. W. WILEY, J. W. LANGLEY, A. B. PRESCOTT, ALFRED TUCKERMAN.

3. *Committee on the Policy of the Association.*

THE PRESIDENT, *Chairman*, THE PERMANENT SECRETARY, THE TREASURER, T. C. MENDENHALL, H. L. FAIRCHILD, JAMES LEWIS HOWE.

4. *Committee on Standards of Measurements.*

T. C. MENDENHALL, *Chairman*, E. W. MORLEY, E. L. NICHOLS, R. S. WOODWARD, H. S. CARHART. With power to add to its number.

5. *Committee on the Association Library.*

F. W. CLARKE, *Chairman*, A. W. BUTLER, W. L. DUDLEY, THOMAS FRENCH, JR.

6. *Committee on Anthropometric Measurements.*

J. MCK. CATTELL, W. W. NEWELL, W. J. MCGEE, FRANZ BOAS.

7. *Committee to Cooperate with the National Educational Association Regarding the Teaching of Science in the Secondary Schools.*

R. S. TARR, H. S. CARHART, A. S. PACKARD, C. F. MABERY, C. E. BESSEY.

8. *Committee for the Collection of Information Relative to Forestry.*

W. H. BREWER, *Chairman*, GIFFORD PINCHOT, ARNOLD HAGUE.

9. *Committee on the Quantitative Study of Biological Variation.*

FRANZ BOAS, *Chairman*, J. MCK. CATTELL, C. S. MINOT, C. H. EIGENMANN, C. B. DAVENPORT.

10. *Committee on the Protection and Preservation of Objects of Arch ological Interest.*

—————, *Chairman*, F. W. PUTNAM, N. H. WINCHELL, G. K. GILBERT, A. W. BUTLER, GEORGE A. DORSEY.

¹ All Committees are expected to present their reports to the COUNCIL not later than the third day of the meeting. Committees sending their reports to the Permanent Secretary one month before a meeting can have them printed for use at the meeting.

SPECIAL COMMITTEES OF THE ASSOCIATION.

II. *Committee on the Study of Blind Vertebrates.*

THEODORE GILL, *Chairman*, A. S. PACKARD, C. O. WHITMAN, S. H. GAGE, H. C. BUMPUS, C. H. EIGENMANN.

12. *Committee on the Teaching of Anthropology in America.*

W J MCGEE, *Chairman*, G. G. MACCURDY, FRANK RUSSELL, FRANZ BOAS, W. H. HOLMES.

13. *Committee on the Relations of the Journal Science with the Association.*

SIMON NEWCOMB, *Chairman*, G. K. GILBERT, J. MCK. CATTELL, THE PRESIDENT, THE PERMANENT SECRETARY.

14. *Committee on the Relations of Plants and Climate.*

WILLIAM TRELEASE, *Chairman*, D. T. MACDOUGAL, J. M. COULTER.

15. *Committee on the Atomic Weight of Thorium.*

CHARLES BASKERVILLE, *Chairman*, F. P. VENABLE, JAMES LEWIS HOWE.

MEETINGS AND OFFICERS OF THE ASSOCIATION OF AMERICAN GEOLOGISTS AND NATURALISTS.

Meeting.	Date.	Place.	Chairman.	Secretary.	Assistant Secretary.	Treasurer.
1st	April 2, 1840,	Philadelphia,	Edw. Hitchcock,*	L. C. Beck,*	{B. Silliman, Jr.,* {C. B. Trego,* {J. D. Whitney,* {M. B. Williams,*	John Locke.*
2d	April 5, 1841,	Philadelphia,	Benj. Silliman,*	L. C. Beck,*		
3d	April 25, 1842,	Boston,	S. G. Morton,*	C. T. Jackson,*		
4th	April 26, 1843,	Albany,	Henry D. Rogers,*	B. Silliman, Jr.,*		
5th	May 8, 1844,	Washington,	John Locke,*	{B. Silliman, Jr.,* {O. P. Hubbard,	Douglas Houghton.*	Douglas Houghton.*
6th	April 30, 1845,	New Haven,	Wm. B. Rogers,*	{B. Silliman, Jr.,* {J. Law. Smith,*		
7th	Sept. 2, 1846,	New York,	C. T. Jackson,*	B. Silliman, Jr.,*	E. C. Herrick.*	B. Silliman, Jr.*
8th	Sept. 20, 1847,	Boston,	Wm. B. Rogers,*†	Jeffries Wyman,*		

* Deceased.

† Professor Rogers, as chairman of this last meeting, called the first meeting of the new Association to order and presided until it was fully organized by the adoption of a constitution. As he was thus the first presiding officer of the new Association, it was directed at the Hartford meeting that his name be placed at the head of the Past Presidents of the American Association for the Advancement of Science.

Meetings	Place	Date	Members in attendance	Number of members
1	Philadelphia	Sept. 20, 1848	?	461
2	Cambridge	Aug. 14, 1849	?	540
3	Charleston	Mar. 12, 1850	?	622
4	New Haven	Aug. 19, 1850	?	704
5	Cincinnati	May 5, 1851	87	800
6	Albany	Aug. 19, 1851	194	769
7	Cleveland	July 28, 1853	?	940
8	Washington	April 26, 1854	168	1004
9	Providence	Aug. 15, 1855	166	605
10	2d Albany	Aug. 20, 1856	381	722
11	Montreal	Aug. 12, 1857	351	946
12	Baltimore	April 28, 1858	190	962
13	Springfield	Aug. 3, 1859	190	862
14	Newport	Aug. 1, 1860	135	644
15	Buffalo	Aug. 15, 1866	79	637
16	Burlington	Aug. 21, 1867	73	415
17	Chicago	Aug. 5, 1868	259	686
18	Salem	Aug. 18, 1869	244	511
19	Troy	Aug. 17, 1870	188	536
20	Indianapolis	Aug. 16, 1871	196	668
21	Dubuque	Aug. 15, 1872	164	610
22	Portland	Aug. 20, 1873	195	670
23	Hartford	Aug. 12, 1874	224	722
24	Detroit	Aug. 11, 1875	165	807
25	2d Buffalo	Aug. 23, 1876	215	867
26	Nashville	Aug. 29, 1877	173	953
27	St. Louis	Aug. 21, 1878	134	962
28	Saratoga	Aug. 27, 1879	256	1030
29	Boston	Aug. 25, 1880	997	1555
30	2d Cincinnati	Aug. 17, 1881	500	1699
31	2d Montreal	Aug. 23, 1882	937	1922
32	Minneapolis	Aug. 15, 1883	328	2033
33	2d Philadelphia	Sept. 3, 1884	1261*	1981
34	Ann Arbor	Aug. 26, 1885	364	1956
35	3d Buffalo	Aug. 18, 1886	445	1886
36	New York	Aug. 10, 1887	729	1956
37	2d Cleveland	Aug. 14, 1888	342	1964
38	Toronto	Aug. 26, 1889	424	1952
39	2d Indianapolis	Aug. 19, 1890	364	1944
40	2d Washington	Aug. 19, 1891	653†	2054
41	Rochester	Aug. 17, 1892	456	2037
42	Madison	Aug. 17, 1893	290	1939
43	Brooklyn	Aug. 15, 1894	488	1802
44	2d Springfield	Aug. 28, 1895	368	1913
45	4th Buffalo	Aug. 24, 1896	333	1890
46	2d Detroit	Aug. 9, 1897	283‡	1782
47	2d Boston	Aug. 22, 1898	903	1729
48	Columbus	Aug. 21, 1899	353	1721
49	2d New York	June 25, 1900	434	1925
50	Denver	Aug. 24, 1901	311	2703

* Including 303 members of the British Association and 9 other foreign guests.

† Including 24 Foreign Honorary members for the meeting.

‡ Including 15 Foreign Honorary members and associates for the meeting.

Officers of the Meetings of the Association.

[The number before the name is that of the meeting; the year of the meeting follows the name; the asterisk after a name indicates that the member is deceased.]

PRESIDENTS.

- | | |
|-------------------------------|--------------------------------|
| 1. { WM. B. ROGERS,* 1848. | 27. O. C. MARSH,* 1878. |
| 2. { W. C. REDFIELD,* 1848. | 28. G. F. BARKER, 1879. |
| 3. JOSEPH HENRY,* 1849. | 29. LEWIS H. MORGAN,* 1880. |
| 4. { A. D. BACHE,* March | 30. G. J. BRUSH, 1881. |
| meeting, 1850, in the ab- | 31. J. W. DAWSON, 1882. |
| sence of JOSEPH HENRY.* | 32. C. A. YOUNG, 1883. |
| August meeting, 1850. | 33. J. P. LESLEY, 1884. |
| 5. { May meeting, 1851. | 34. H. A. NEWTON,* 1885. |
| 6. LOUIS AGASSIZ,* August | 35. EDWARD S. MORSE, 1886. |
| meeting, 1851. | 36. S. P. LANGLEY, 1887. |
| (No meeting in 1852.) | 37. J. W. POWELL, 1888. |
| 7. BENJAMIN PIERCE,* 1853. | 38. T. C. MENDENHALL, 1889. |
| 8. JAMES D. DANA,* 1854. | 39. G. LINCOLN GOODALE, 1890. |
| 9. JOHN TORREY,* 1855. | 40. ALBERT B. PRESCOTT, 1891. |
| 10. JAMES HALL,* 1856. | 41. JOSEPH LeCONTE,* 1892. |
| { ALEXIS CASWELL,* 1857, | 42. WILLIAM HARKNESS, 1893. |
| in place of J. W. BAILEY,* | 43. DANIEL G. BRINTON,* 1894. |
| deceased. 1858, in the ab- | 44. E. W. MORLEY, 1895. |
| sence of JEFFRIES WYMAN.* | { EDWARD D. COPE,* 1896. |
| 13. STEPHEN ALEXANDER,* 1859. | 45. { THEODORE GILL, as senior |
| 14. ISAAC LEA,* 1860. | vice-president acted after |
| (No meetings for 1861-65.) | { the death of Prof. COPE. |
| 15. F. A. P. BARNARD,* 1866. | WOLCOTT GIBBS, 1897, ab- |
| 16. J. S. NEWBERRY,* 1867. | 46. { sent. W J McGEE, Act- |
| 17. B. A. GOULD,* 1868. | ing President. |
| 18. J. W. FOSTER,* 1869. | 47. F. W. PUTNAM, 1898. |
| 19. T. STERRY HUNT,* 1870, | { EDWARD ORTON,* 1899. |
| in the absence of WM. | GROVE K. GILBERT, elec- |
| CHAUVENET.* | ted by the General Com- |
| 20. ASA GRAY,* 1871. | 48. { mittee December, 1899, |
| 21. J. LAWRENCE SMITH,* 1872. | { to fill the vacancy caused |
| 22. JOSEPH LOVERING,* 1873. | by the death of Prof. |
| 23. J. L. LeCONTE,* 1874. | ORTON. |
| 24. J. E. HILGARD,* 1875. | 49. R. S. WOODWARD, 1900. |
| 25. WILLIAM B. ROGERS,* 1876. | 50. C. S. MINOT, 1901. |
| 26. SIMON NEWCOMB, 1877. | 51. ASAPH HALL, 1902. |

OFFICERS OF THE MEETINGS OF THE ASSOCIATION.

VICE-PRESIDENTS.

There were no Vice-Presidents until the 11th meeting when there was a single Vice-President for each meeting. At the 24th meeting, the Association met in Sections A and B, each presided over by a Vice-President. At the 31st meeting nine sections were organized, each with a Vice-President as its presiding officer. In 1886 Section G (Microscopy) was given up. In 1892, Section F was divided into F, Zoology; G, Botany.

1857-1874.

- | | |
|--|--|
| 11. ALEXIS CASWELL,* 1857,
acted as President. | 17. CHAS. WHITTLESEY,* 1868.
18. OGDEN N. ROOD, 1869. |
| 12. JOHN E. HOLBROOK,* 1858,
not present. | 19. T. STERRY HUNT,* 1870,
acted as President. |
| 13. EDWARD HITCHCOCK,* 1859. | 20. G. F. BARKER, 1871. |
| 14. B. A. GOULD,* 1860. | 21. ALEX. WINCHELL,* 1872. |
| 15. B. A. GOULD,* 1866, in the
absence of R. W. GIBBES. | 22. A. H. WORTHEN,* 1873,
not present. |
| 16. WOLCOTT GIBBS, 1867. | 23. C. S. LYMAN,* 1874. |

1875-1881.

Section A.—Mathematics, Physics, and Chemistry.

24. H. A. NEWTON,* 1875.
25. C. A. YOUNG, 1876.
26. R. H. THURSTON, 1877,
in the absence of E. C.
PICKERING.
27. R. H. THURSTON, 1878.
28. S. P. LANGLEY, 1879.
29. ASAPH HALL, 1880.
30. WM. HARKNESS, 1881, in
the absence of A. M. MAYER.*

Section B.—Natural History.

24. J. W. DAWSON, 1875.
25. EDWARD S. MORSE, 1876.
26. O. C. MARSH,* 1877.
27. AUG. R. GROTE, 1878.
28. J. W. POWELL, 1879.
29. ALEX. AGASSIZ, 1880.
30. EDWARD T. COX, 1881, in
the absence of GEORGE
ENGELMANN.*

CHAIRMEN OF SUBSECTIONS, 1875-1881.

Subsection of Chemistry.

24. S. W. JOHNSON, 1875.
25. G. F. BARKER, 1876.
26. N. T. LUPTON,* 1877.
27. F. W. CLARKE, 1878.
28. F. W. CLARKE, 1879, in the
absence of IRA REMSEN.
29. J. M. ORDWAY, 1880.
30. G. C. CALDWELL, 1881, in
the absence of W. R.
NICHOLS.*

Subsection of Microscopy.

25. R. H. WARD, 1876.
26. R. H. WARD, 1877.
27. R. H. WARD, 1878, in the
absence of G. S. BLACKIE.*

28. E. W. MORLEY, 1879.
29. S. A. LATTIMORE, 1880.
30. A. B. HERVEY, 1881.

Subsection of Anthropology.

24. LEWIS H. MORGAN,* 1875.
25. LEWIS H. MORGAN,* 1876.
26. DANIEL WILSON,* 1877, not
present.

United with Section B.

28. DANIEL WILSON,* 1879.
29. J. W. POWELL, 1880.
30. GARRICK MALLERY,* 1881.

Subsection of Entomology.

30. J. G. MORRIS,* 1881.

OFFICERS OF THE MEETINGS OF THE ASSOCIATION.

VICE-PRESIDENTS OF SECTIONS, 1882—

Section A.—Mathematics and Astronomy.

31. W. A. ROGERS,* 1882, in the absence of WM. HARKNESS.
32. W. A. ROGERS,* 1883.
33. H. T. EDDY, 1884.
34. WM. HARKNESS, 1885, in the absence of J.M.VAN VLECK.
35. J. W. GIBBS, 1886.
36. J. R. EASTMAN, 1887, in place of W.FERREL,* res'd.
37. ORMOND STONE, 1888.
38. R. S. WOODWARD, 1889.
39. S. C. CHANDLER, 1890.
40. E. W. HYDE, 1891.
41. J. R. EASTMAN, 1892.
42. C. L. DOOLITTLE, 1893.
43. { G. C. COMSTOCK, 1894.
EDGAR FRISBY, 1894.
44. EDGAR FRISBY, 1895, in place of E.H.HOLDEN, resigned.
45. ALEX. MACFARLANE, 1896, in place of WM. E. STORY, resigned.
46. W. W. BEMAN, 1897.
47. E. E. BARNARD, 1898.
48. ALEX. MACFARLANE, 1899.
49. ASAPH HALL, JR., 1900.
50. JAMES MACMAHON, 1901.
51. G. W. HOUGH, 1902.

Section B.—Physics.

31. T. C. MENDENHALL, 1882.
32. H. A. ROWLAND,* 1883.
33. J. TROWBRIDGE, 1884.
34. S. P. LANGLEY, 1885, in place of C.F.BRACKETT, res'd.
35. C. F. BRACKETT, 1886.
36. W. A. ANTHONY, 1887.
37. A. A. MICHELSON, 1888.
38. H. S. CARHART, 1889.
39. CLEVELAND ABBE, 1890.
40. F. E. NIPHER, 1891.
41. B. F. THOMAS, 1892.
42. E. L. NICHOLS, 1893.
43. WM. A. ROGERS, 1894.

44. W.LECONTE STEVENS, 1895.
45. CARL LEO MEES, 1896.
46. CARL BARUS, 1897.
47. F. P. WHITMAN, 1898.
48. ELIHU THOMSON, 1899.
49. ERNEST MERRITT, 1900.
50. D. B. BRACE, 1901.
51. W. S. FRANKLIN, 1902.

Section C.—Chemistry.

31. H. C. BOLTON, 1882.
32. E. W. MORLEY, 1883.
33. J. W. LANGLEY, 1884.
34. N. T. LUPTON,* 1885, in the absence of W. R. NICHOLS.*
35. H. W. WILEY, 1886.
36. A. B. PRESCOTT, 1887.
37. C. E. MUNROE, 1888.
38. W. L. DUDLEY, 1889.
39. R. B. WARDER, 1890.
40. R. C. KEDZIE, 1891.
41. ALFRED SPRINGER, 1892.
42. EDWARD HART, 1893.
43. T. H. NORTON, 1894.
44. WM. MCMURTRIE, 1895.
45. W. A. NOYES, 1896.
46. W. P. MASON, 1897.
47. EDGAR F. SMITH, 1898.
48. F. P. VENABLE, 1899.
49. JAS. LEWIS HOWE, 1900.
50. JOHN H. LONG, 1901.
51. H. A. WEBER, 1902.

Section D.—Mechanical Science and Engineering.

31. W. P. TROWBRIDGE,* 1882.
32. DEVOLSON WOOD, 1883, absent, but place was not filled.
33. R. H. THURSTON, 1884.
34. J. BURKITT WEBB, 1885.
35. O. CHANUTE, 1886.
36. E. B. COXE, 1887.
37. C. J. H. WOODBURY, 1888.
38. JAMES E. DENTON, 1889.
39. JAMES E. DENTON, 1890, in place of A. BEARDSLEY, absent.

OFFICERS OF THE MEETINGS OF THE ASSOCIATION.

VICE-PRESIDENTS OF SECTIONS, CONTINUED.

Section D—Mechanical Science and Engineering, continued.

40. THOMAS GRAY, 1891.
41. J. B. JOHNSON, 1892.
42. S. W. ROBINSON, 1893.
43. MANSFIELD MERRIMAN, 1894.
44. WILLIAM KENT, 1895.
45. FRANK O. MARVIN, 1896.
46. JOHN GALBRAITH, 1897.
47. JOHN GALBRAITH, 1898, in the absence of M. E. COOLEY.
48. STORM BULL, 1899.
49. JOHN A. BRASHEAR, 1900.
50. H. S. JACOBY, 1901.
51. J. J. FLATHER, 1902.

Section E.—Geology and Geography.

31. E. T. COX, 1882.
32. C. H. HITCHCOCK, 1883.
33. N. H. WINCHELL, 1884.
34. EDWARD ORTON,* 1885.
35. T. C. CHAMBERLIN, 1886.
36. G. K. GILBERT, 1887.
37. GEORGE H. COOK,* 1888.
38. CHARLES A. WHITE, 1889.
39. JOHN C. BRANNER, 1890.
40. J. J. STEVENSON, 1891.
41. H. S. WILLIAMS, 1892.
42. CHARLES D. WALCOTT, 1893.
43. SAMUEL CALVIN, 1894.
44. JED. HOTCHKISS, 1895.
45. B. K. EMERSON, 1896.
46. { I. C. WHITE, 1897.
 { E. W. CLAYPOLE,* 1897.
47. H. L. FAIRCHILD, 1898.
48. J. F. WHITEAVES, 1899.
49. J. F. KEMP, 1900.
50. C. R. VAN HISE, 1901.
51. O. A. DERBY, 1902.

Section F.—Biology, 1882-1892.

31. W. H. DALL, 1882.
32. W. J. BEAL, 1883.
33. E. D. COPE,* 1884.

34. T. J. BURRILL, 1885, in the absence of B. G. WILDER.
35. H. P. BOWDITCH, 1886.
36. W. G. FARLOW, 1887.
37. C. V. RILEY,* 1888.
38. GEORGE L. GOODALE, 1889.
39. C. S. MINOT, 1890.
40. J. M. COULTER, 1891.
41. S. H. GAGE, 1892.

Section F.—Zoology.

42. HENRY F. OSBORN, 1893.
43. J. A. LINTNER,* 1894, in place of S. H. SCUDDER, res'd.
44. L. O. HOWARD, 1895, in place of D. S. JORDAN, res'd.
45. THEO. GILL, 1896.
46. L. O. HOWARD, 1897, in place of G. BROWN GOODE,* deceased.
47. A. S. PACKARD, 1898.
48. S. H. GAGE, 1899.
49. C. B. DAVENPORT, 1900.
50. D. S. JORDAN, 1901.
51. C. C. NUTTING, 1902.

Section G. Microscopy, 1882-85.

31. A. H. TUTTLE, 1882.
32. J. D. COX, 1883.
33. T. G. WORMLEY,* 1884.
34. S. H. GAGE, 1885.

(Section united with F in 1886)

Section G.—Botany.

42. CHARLES E. BESSEY, 1893.
43. { L. M. UNDERWOOD, 1894.
 { C. E. BESSEY, 1894.
44. J. C. ARTHUR, 1895.
45. N. L. BRITTON, 1896.
46. G. F. ATKINSON, 1897.
47. W. G. FARLOW, 1898.
48. C. R. BARNES, 1899.
49. W. TRELEASE, 1900.
50. B. T. GALLOWAY, 1901.
51. D. H. CAMPBELL, 1902.

OFFICERS OF THE MEETINGS OF THE ASSOCIATION.

VICE-PRESIDENTS OF SECTIONS, CONTINUED.

Section H.—Anthropology.

- | | |
|---|--|
| 31. ALEX. WINCHELL,* 1882. | 32. FRANKLIN B. HOUGH,* 1883. |
| 32. OTIS T. MASON, 1883. | 33. JOHN EATON,* 1884. |
| 33. EDWARD S. MORSE, 1884. | 34. EDWARD ATKINSON, 1885. |
| 34. J. OWEN DORSEY,* 1885,
in the absence of W. H. DALL. | 35. JOSEPH CUMMINGS,* 1886. |
| 35. HORATIO HALE,* 1886. | 36. H. E. ALVORD, 1887. |
| 36. D. G. BRINTON,* 1887. | 37. CHARLES W. SMILEY, 1888. |
| 37. CHARLES C. ABBOTT, 1888. | 38. CHARLES S. HILL, 1889. |
| 38. GARRICK MALLERY,* 1889. | 39. J. RICHARDS DODGE, 1890. |
| 39. FRANK BAKER, 1890. | 40. EDMUND J. JAMES, 1891. |
| 40. JOSEPH JASTROW, 1891. | 41. L. F. WARD, 1892, in place
of S. D. HORTON,* resigned. |
| 41. W. H. HOLMES, 1892. | 42. WILLIAM H. BREWER, 1893. |
| 42. J. OWEN DORSEY,* 1893. | 43. HENRY FARQUHAR, 1894. |
| 43. FRANZ BOAS, 1894. | 44. B. E. FERNOW, 1895. |
| 44. F. H. CUSHING,* 1895. | 45. W. L. LAZENBY, 1896. |
| 45. ALICE C. FLETCHER, 1896. | 46. R. T. COLBURN, 1897. |
| 46. W J MCGEE, 1897. | 47. ARCHIBALD BLUE, 1898. |
| 47. J. MCK. CATTELL, 1898. | 48. MARCUS BENJAMIN, 1899. |
| 48. THOMAS WILSON,* 1899. | 49. MARCUS BENJAMIN, 1900,
in the absence of C. M.
WOODWARD. |
| 49. A. W. BUTLER, 1900. | 50. JOHN HYDE, 1901. |
| 50. J. WALTER FEWKES, 1901. | 51. CARROLL D. WRIGHT, 1902. |
| 51. STEWART CULIN, 1902. | |

Section I.—Social and Economic Science.

31. E. B. ELLIOTT,* 1882.

Section K.—Physiology and Experimental Medicine.

51. W. H. WELCH, 1902.

SECRETARIES.

General Secretaries, 1848—

- | | |
|--|---|
| 1. WALTER R. JOHNSON,* 1848 | 11. JOHN L. LECONTE,* 1857. |
| 2. E. N. HORSFORD,* 1849, in
the absence of JEFFRIES
WYMAN.* | 12. W.M.GILLESPIE,* 1858, in the
absence of WM.CHAUVENET,* |
| 3. L. R. GIBBS, 1850, in the ab-
sence of E. C. HERRICK.* | 13. WM. CHAUVENET,* 1859. |
| 4. E. C. HERRICK,* 1850. | 14. JOSEPH LECONTE,* 1860. |
| 5. WM. B. ROGERS,* 1851, in
the absence of E. C. HERRICK.* | 15. ELIAS LOOMIS,* 1866, in
the absence of W. P. TROW-
BRIDGE.* |
| 6. WM. B. ROGERS,* 1851. | 16. C. S. LYMAN,* 1867. |
| 7. S. ST. JOHN,* 1853, in the
absence of J. D. DANA.* | 17. SIMON NEWCOMB, 1868, in
the absence of A.P. ROCKWELL. |
| 8. J. LAWRENCE SMITH,* 1854. | 18. O. C. MARSH,* 1869. |
| 9. WOLCOTT GIBBS, 1855. | 19. F. W. PUTNAM, 1870, in the
absence of C. F. HARTT.* |
| 10. B. A. GOULD,* 1856. | 20. F. W. PUTNAM, 1871. |

OFFICERS OF THE MEETINGS OF THE ASSOCIATION.

SECRETARIES, CONTINUED.

21. EDWARD S. MORSE, 1872. *Assistant General Secretaries,*
22. C. A. WHITE, 1873. 1882-1887.
23. A. C. HAMLIN, 1874. 31. J. R. EASTMAN, 1882.
24. S. H. SCUDDER, 1875. 32. ALFRED SPRINGER, 1883.
25. T. C. MENDENHALL, 1876. 33. C. S. MINOT, 1884, in the ab-
26. AUG. R. GROTE, 1877. sence of E. S. HOLDEN.
27. H. C. BOLTON, 1878. 34. S. G. WILLIAMS,* 1885, in the
28. H. C. BOLTON, 1879, in the absence of C. C. ABBOTT.
29. J. K. REES, 1880. 35. W. H. PETTEE, 1886.
30. C. V. RILEY,* 1881. 36. J. C. ARTHUR, 1887.
31. WILLIAM SAUNDERS, 1882. *Secretaries of the Council, 1888-*
32. J. R. EASTMAN, 1883. 37. C. LEO MEES, 1888.
33. ALFRED SPRINGER, 1884. 38. H. C. BOLTON, 1889.
34. C. S. MINOT, 1885. 39. H. W. WILEY, 1890.
35. S. G. WILLIAMS,* 1886. 40. A. W. BUTLER, 1891.
36. WILLIAM H. PETTEE, 1887. 41. T. H. NORTON, 1892.
37. JULIUS POHLMAN, 1888. 42. H. LEROY FAIRCHILD, 1893.
38. C. LEO MEES, 1889. 43. JAS. LEWIS HOWE, 1894.
39. H. C. BOLTON, 1890. 44. CHARLES R. BARNES, 1895.
40. H. W. WILEY, 1891. 45. ASAPH HALL, JR., 1896.
41. A. W. BUTLER, 1892. 46. D. S. KELLCOTT,* 1897.
42. T. H. NORTON, 1893. 47. FREDERICK BEDELL, 1898.
43. H. L. FAIRCHILD, 1894. 48. CHARLES BASKERVILLE, 1899.
44. JAS. LEWIS HOWE, 1895. 49. WILLIAM HALLOCK, 1900.
45. CHARLES R. BARNES, 1896. 50. D. T. MACDOUGAL, 1901.
46. ASAPH HALL, JR., 1897. 51. H. B. WARD, 1902.
47. J. MCMAHON, 1898, in place *Secretaries of Section A.—Mathe-*
of D. S. KELLCOTT,* deceased. *matics, Physics and Chemistry,*
1875-1881.
48. F. BEDELL, 1899. 24. } S. P. LANGLEY, 1875.
49. CHAS. BASKERVILLE, 1900. { T. C. MENDENHALL, 1875.
50. JOHN M. COULTER, 1901, in 25. A. W. WRIGHT, 1876.
- the absence of WILLIAM 26. H. C. BOLTON, 1877.
- HALLOCK. 27. F. E. NIPHER, 1878.
51. D. T. MACDOUGAL, 1902. 28. J. K. REES, 1879.
- Permanent Secretaries, 1851-* 29. H. B. MASON, 1880.
- 5-7. SPENCER F. BAIRD,* 1851-4* 30. E. T. TAPPAN, 1881, in the
- 8-17. JOSEPH LOVERING,* 1854* absence of JNO. TROW-
- 68.* BRIDGE.
18. F. W. PUTNAM, 1869, in the *Secretaries of Section B.—Nat-*
absence of J. LOVERING.* *ural History, 1874-1881.*
- 19-21. JOSEPH LOVERING,* 1870 24. EDWARD S. MORSE, 1875.
- 73. 25. ALBERT H. TUTTLE, 1876.
- 22-46. F. W. PUTNAM, 1873-98. 26. WILLIAM H. DALL, 1877.
- 47-53. L. O. HOWARD, 1898-05.

OFFICERS OF THE MEETINGS OF THE ASSOCIATION.

SECRETARIES, CONTINUED.

- | | |
|---|------------------------------|
| 27. GEORGE LITTLE, 1878. | 29. CHARLES V. RILEY,* 1880. |
| 28. WM. H. DALL, 1879, in the
absence of A. C. WETHERBY. | 30. WILLIAM SAUNDERS, 1881. |

SECRETARIES OF SUBSECTIONS, 1875-1881.

- | | |
|---|--|
| <i>Subsection of Chemistry.</i> | |
| 24. F. W. CLARKE, 1875. | 25. OTIS T. MASON, 1876. |
| 25. H. C. BOLTON, 1876. | 26, 27. United with Section B. |
| 26. P. SCHWEITZER, 1877. | 28, 29, 30. J. G. HENDERSON,
1879-81. |
| 27. A. P. S. STUART, 1878. | <i>Subsection of Microscopy.</i> |
| 28. W. R. NICHOLS,* 1879. | 25. E. W. MORLEY, 1876. |
| 29. C. E. MUNROE, 1880. | 26. T. O. SOMMERS, JR., 1877. |
| 30. ALFRED SPRINGER, 1881, in
the absence of R. B. WARDER. | 27. G. J. ENGELMANN, 1878. |
| <i>Subsection of Entomology.</i> | 28, 29. A. B. HERVEY, 1879-80. |
| 30. B. P. MANN, 1881. | 30. W. H. SEAMAN, 1881, in the
absence of S. P. SHARPLES. |
| <i>Subsection of Anthropology.</i> | |
| 24. F. W. PUTNAM, 1875. | |

SECRETARIES OF THE SECTIONS, 1882-

- | | |
|---|---|
| <i>Section A.—Mathematics and
Astronomy.</i> | |
| 31. H. T. EDDY, 1882. | 48. JOHN F. HAYFORD, 1899. |
| 32. G. W. HOUGH, 1883, in the
absence of W. W. JOHNSON. | 49. W. M. STRONG, 1900. |
| 33. G. W. HOUGH, 1884. | 50. G. A. MILLER, 1901, in place
of H. C. LORD, resigned. |
| 34. E. W. HYDE, 1885. | 51. E. S. CRAWLEY, 1902. |
| 35. S. C. CHANDLER, 1886. | <i>Section B.—Physics.</i> |
| 36. H. M. PAUL, 1887. | 31. C. S. HASTINGS, 1882. |
| 37. C. C. DOOLITTLE, 1888. | 32. F. E. NIPHER, 1883, in the
absence of C. K. WEAD. |
| 38. G. C. COMSTOCK, 1889. | 33. N. D. C. HODGES, 1884. |
| 39. W. W. BEMAN, 1890. | 34. B. F. THOMAS, 1885, in place
of A. A. MICHELSON, resigned. |
| 40. F. H. BIGELOW, 1891. | 35. H. S. CARHART, 1886. |
| 41. WINSLOW UPTON, 1892. | 36. C. LEO MEES, 1887. |
| 42. C. A. WALDO, 1893, in the
absence of A. W. PHILLIPS. | 37. ALEX. MACFARLANE, 1888. |
| 43. J. C. KERSHNER, 1894, in
place of W. W. BEMAN, res'd. | 38. E. L. NICHOLS, 1889. |
| 44. ASAPH HALL, JR., 1895, in
place of E. H. MOORE, res'd. | 39. E. M. AVERY, 1890. |
| 45. EDWIN B. FROST, 1896. | 40. ALEX. MACFARLANE, 1891. |
| 46. JAMES McMAHON, 1897. | 41. BROWN AYRES, 1892. |
| 47. WINSLOW UPTON, 1898, in
place of ALEX. ZIWET,
resigned. | 42. W. LeCONTE STEVENS, 1893. |
| | 43. B. W. SNOW, 1894. |
| | 44. E. MERRITT, 1895. |
| | 45. FRANK P. WHITMAN, 1896. |
| | 46. FREDERICK BEDELL, 1897. |

OFFICERS OF THE MEETINGS OF THE ASSOCIATION.

SECRETARIES OF THE SECTIONS, CONTINUED.

47. W. S. FRANKLIN, 1898, in place of E. B. ROSA, resigned.
48. WILLIAM HALLOCK, 1899.
49. R. A. FESSENDEN, 1900.
50. JOHN ZELENY, 1901, in place of J. O. REED, resigned.
51. E. F. NICHOLS, 1902.
Section C.—Chemistry.
31. ALFRED SPRINGER, 1882.
32. { J. W. LANGLEY, 1883.
W. McMURTRIE, 1883.
33. H. CARMICHAEL, 1884, in the absence of R. B. WARDER.
34. F. P. DUNNINGTON, 1885.
35. W. McMURTRIE, 1886.
36. C. F. MABERY, 1887.
37. W. L. DUDLEY, 1888.
38. EDWARD HART, 1889.
39. W. A. NOYES, 1890.
40. T. H. NORTON, 1891.
41. JAS. LEWIS HOWE, 1892.
42. H. N. STOKES, 1893, in the absence of J. U. NEF.
43. MORRIS LOEB, 1894, in place of S. M. BABCOCK, resigned.
44. { W. P. MASON, 1895.
W. O. ATWATER, 1895.
45. FRANK P. VENABLE, 1896.
46. P. C. FREER, 1897.
47. C. BASKERVILLE, 1898.
48. H. A. WEBER, 1899.
49. A. A. NOYES, 1900.
50. W. MCPHERSON, 1901.
51. F. C. PHILLIPS, 1902.
Section D.—Mechanical Science and Engineering.
31. J. BURKITT WEBB, 1882, in the absence of C. B. DUDLEY.
32. J. BURKITT WEBB, 1883, *pro tempore*.
33. J. BURKITT WEBB, 1884.
34. C. J. H. WOODBURY, 1885.
35. WILLIAM KENT, 1886.
36. G. M. BOND, 1887.
37. ARTHUR BEARDSLEY, 1888.
38. W. B. WARNER, 1889.
39. THOMAS GRAY, 1890.
40. WILLIAM KENT, 1891.
41. O. H. LANDRETH, 1892.
42. D. S. JACOBUS, 1893.
43. JOHN H. KINEALY, 1894.
44. H. S. JACOBY, 1895.
45. JOHN GALBRAITH, 1896.
46. JOHN J. FLATHER, 1897.
47. W. S. ALDRICH, 1898.
48. J. M. PORTER, 1899.
49. W. T. MAGRUDER, 1900.
50. C. W. COMSTOCK, 1901, in the absence of W. H. JAQUES.
51. C. A. WALDO, 1902.
Section E.—Geology and Geography.
31. H. S. WILLIAMS, 1882, in the absence of C. E. DUTTON.
32. A. A. JULIEN, 1883.
33. E. A. SMITH, 1884.
34. G. K. GILBERT, 1885, in the absence of H. C. LEWIS.*
35. E. W. CLAYPOLE,* 1886.
36. W. M. DAVIS, 1887, in the absence of T. B. COMSTOCK.
37. JOHN C. BRANNER, 1888.
38. JOHN C. BRANNER, 1889.
39. SAMUEL CALVIN, 1890.
40. W J MCGEE, 1891.
41. R. D. SALISBURY, 1892.
42. W. H. HOBBS,* 1893, in place of R. T. HILL, resigned.
43. JED. HOTCHKISS,* 1894, in place of W. M. DAVIS, res'd
44. J. PERRIN SMITH, 1895.
45. W. N. RICE, 1896, in place of A. C. GILL, resigned.
46. C. H. SMITH, JR., 1897.
47. WARREN UPHAM, 1898.
48. ARTHUR HOLLICK, 1899.
49. J. A. HOLMES, 1900.

SECRETARIES OF THE SECTIONS, CONTINUED.

50. H. B. PATTON, 1901, in the absence of R. A. F. PENROSE.
51. F. P. GULLIVER, 1902.
- Section F.—Biology, 1882–1892.*
31. WILLIAM OSLER, 1882, in the absence of C. S. MINOT.
32. S. A. FORBES, 1883.
33. C. E. BESSEY, 1884.
34. J. A. LINTNER,* 1885, in place of C. H. FERNALD, res'd
35. J. C. ARTHUR, 1886.
36. J. H. COMSTOCK, 1887.
37. B. E. FERNOW, 1888.
38. A. W. BUTLER, 1889.
39. J. M. COULTER, 1890.
40. A. J. COOK, 1891.
41. D. B. HALSTEAD, 1892.
- Section F.—Zoology.*
42. L. O. HOWARD, 1893.
43. JOHN B. SMITH, 1894, in place of Wm. LIBBY, JR., resigned.
44. C. W. HARGITT, 1895, in place of S. A. FORBES, res'd
45. D. S. KELLICOTT,* 1896.
46. C. C. NUTTING, 1897.
47. R. T. JACKSON, 1898, in place of C. W. STILES, resigned
48. C. L. MARLATT, 1899, in place of F. W. TRUE, resigned.
49. C. H. EIGENMANN, 1900.
50. H. B. WARD, 1901.
51. C. W. STILES, 1902.
- Section G.—Microscopy, 1882–85*
31. ROBERT BROWN, JR., 1882.
32. CARL SELER, 1883.
33. ROMYN HITCHCOCK, 1884.
34. W. H. WALMSLEY, 1885.
- Section G.—Botany.*
42. B. T. GALLOWAY, 1893, in the absence of F. V. COVILLE.
43. CHAS. R. BARNES, 1894.
44. { B. T. GALLOWAY, 1895.
M. B. WAITE, 1895.
45. GEORGE F. ATKINSON, 1896.
46. F. C. NEWCOMBE, 1897.
47. ERWIN F. SMITH, 1898.
48. W. A. KELLERMAN, 1899.
49. D. T. MACDOUGAL, 1900.
50. ERNST A. BESSEY, 1901, in the absence of A. S. HITCHCOCK
51. H. VON SCHRENK, 1902.
- Section H.—Anthropology.*
31. OTIS T. MASON, 1882.
32. G. H. PERKINS, 1883.
33. G. H. PERKINS, 1884, in the absence of W. H. HOLMES.
34. ERMINNIE A. SMITH,* 1885.
35. A. W. BUTLER, 1886.
36. CHAS. C. ABBOTT, 1887, in the absence of F. W. LANGDON.
37. FRANK BAKER, 1888.
38. W. M. BEAUCHAMP, 1889.
39. JOSEPH JASTROW, 1890.
40. W. H. HOLMES, 1891.
41. W. M. BEAUCHAMP, 1892, in place of S. CULIN, resigned.
42. W. K. MOOREHEAD, 1893.
43. A. F. CHAMBERLIN, 1894.
44. { STEWART CULIN and W.
W. TOOKER, 1895, in place
of ANITA N. MCGEE, re-
signed.
45. G. H. PERKINS, 1896, in place of J. G. BOURKE,* dec'd.
46. ANITA N. MCGEE, 1897, in place of HARLAN I. SMITH, resigned.
47. MARSHALL H. SAVILLE, 1898.
48. E. W. SCRIPTURE, 1899, in place of GEO. A. DORSEY, resigned.
49. FRANK RUSSELL, 1900.
50. G. G. MACCURDY, 1901.
51. HARLAN I. SMITH, 1902.

OFFICERS OF THE MEETINGS OF THE ASSOCIATION.

SECRETARIES OF THE SECTIONS, CONTINUED.

- Section I.—Social and Economic Science.*
- | | |
|--|--|
| 31. { FRANKLIN B. HOUGH,* 1882 | 42. NELLIE S. KEDZIE, 1893. |
| { J. RICHARDS, DODGE, 1882 | 43. MANLEY MILES, 1894. |
| 32. JOSEPH CUMMINGS,* 1883. | 44. W. R. LAZENBY, 1895, in place of E. A. ROSS, resigned. |
| 33. CHARLES W. SMILEY, 1884. | 45. R. T. COLBURN, 1896. |
| 34. CHAS. W. SMILEY, 1885, in the absence of J. W. CHICKERING. | 46. ARCHIBALD BLUE, 1897. |
| 35. H. E. ALVORD, 1886. | 47. MARCUS BENJAMIN, 1898. |
| 36. W. R. LAZENBY, 1887. | 48. CALVIN M. WOODWARD, 1899. |
| 37. CHARLES S. HILL, 1888. | 49. H. T. NEWCOMB, 1900. |
| 38. J. RICHARDS DODGE, 1889. | 50. R. A. PEARSON, 1901, in place of CORA A. BENNESON, resigned. |
| 39. B. E. FERNOW, 1890. | 51. F. R. RUTTER, 1902, in place of Walter F. Willcox, resigned. |
| 40. B. E. FERNOW, 1891. | |
| 41. HENRY FARQUHAR, 1892, in place of L. F. WARD, made Vice President. | <i>Section K.—Physiology and Experimental Medicine.</i> |
| | 51. F. S. LEE, 1902. |

TREASURERS.

- | | |
|---|-----------------------------------|
| 1. JEFFRIES WYMAN,* 1848. | 9-19. A. L. ELWYN,* 1855-1870. |
| 2. A. L. ELWYN,* 1849. | |
| 3. ST. J. RAVENEL,* 1850, in the absence of A. L. ELWYN.* | 20-30. WM. S. VAUX,* 1871-1881. |
| 4. A. L. ELWYN,* 1850. | 32-42. WM. LILLY,* 1882-93. |
| 5. SPENCER F. BAIRD,* 1851, in the absence of A. L. ELWYN,* | 43-49. R. S. WOODWARD, 1894-1900. |
| 6-7. A. L. ELWYN,* 1851-53. | 50-54. R. S. WOODWARD, 1901-1904. |
| 8. J. L. LeCONTE,* 1854, in the absence of A. L. ELWYN.* | |

Commonwealth of Massachusetts.

In the Year One Thousand Eight Hundred and Seventy-Four.

AN ACT

TO INCORPORATE THE "AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE."

Be it enacted by the Senate and House of Representatives, in General Court assembled, and by the authority of the same, as follows:

SECTION 1. Joseph Henry of Washington, Benjamin Pierce of Cambridge, James D. Dana of New Haven, James Hall of Albany, Alexis Caswell of Providence, Stephen Alexander of Princeton, Isaac Lea of Philadelphia, F. A. P. Barnard of New York, John S. Newberry of Cleveland, B. A. Gould of Cambridge, T. Sterry Hunt of Boston, Asa Gray of Cambridge, J. Lawrence Smith of Louisville, Joseph Lovering of Cambridge, and John LeConte of Philadelphia, their associates, the officers and members of the Association, known as the "American Association for the Advancement of Science," and their successors, are hereby made a corporation by the name of the "American Association for the Advancement of Science," for the purpose of receiving, purchasing, holding, and conveying real and personal property, which it now is, or hereafter may be, possessed of, with all the powers and privileges, and subject to the restrictions, duties and liabilities set forth in the general laws which now or hereafter may be in force and applicable to such corporations.

SECTION 2. Said corporation may have and hold by purchase, grant, gift, or otherwise, real estate not exceeding one hundred thousand dollars in value, and personal estate of the value of two hundred and fifty thousand dollars.

SECTION 3. Any two of the corporators above named are hereby authorized to call the first meeting of the said corporation in the month of August next ensuing, by notice thereof "by mail," to each member of the said Association.

SECTION 4. This act shall take effect upon its passage.

HOUSE OF REPRESENTATIVES, March 10, 1874.

Passed to be enacted,

JOHN E. SANFORD, *Speaker*.

IN SENATE, March 17, 1874.

Passed to be enacted,

GEO. B. LORING, *President*.

March 19, 1874.

Approved.

W. B. WASHBURN.

SECRETARY'S DEPARTMENT,

Boston, April 3, 1874.

A true copy, Attest:

DAVID PULSIFER,

Deputy Secretary of the Commonwealth.

CONSTITUTION

OF THE

AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE.

Incorporated by Act of the General Court of the Commonwealth of Massachusetts.

OBJECTS.

ARTICLE 1. The objects of the Association are, by periodical and migratory meetings, to promote intercourse between those who are cultivating science in different parts of America, to give a stronger and more general impulse and more systematic direction to scientific research, and to procure for the labors of scientific men increased facilities and a wider usefulness.

MEMBERSHIP.

ART. 2. The Association shall consist of members, fellows, patrons, corresponding members and honorary fellows.

MEMBERS.

ART. 3. Any person may become a member of the Association upon recommendation in writing by two members or fellows, and election by the Council. Any incorporated scientific society or institution, or any public or incorporated library, may be enrolled as a member of the Association by vote of the Council by payment of the initiation fee; such society, institution, or library may be represented by either the President, Curator, Director, or Librarian presenting proper credentials at any meeting of the Association for which the assessment has been paid.

ASSOCIATES.

Associates for any single meeting shall be admitted on the payment of three dollars, such associates to have all the privileges of the meeting, except reading papers and voting.

Members of scientific societies whose meetings are contemporaneous with, or immediately subsequent to, that of the Associa-

CONSTITUTION.

tion, and which are recognized by vote of the Council as "Affiliated Societies," may become associate members for that meeting on the payment of three dollars. They shall be entitled to all the privileges of membership except voting or appointment to office, but their names shall not appear in the list of members printed in the annual report.

FOREIGN ASSOCIATES.

Any member or fellow of any national scientific or educational institution, or of any society or academy of science, of any country not in America, who may be present at any meeting of the Association shall, on presenting the proper credentials, be enrolled without fee as a Foreign Associate, and shall be entitled to all the privileges of the meeting except voting on matters of business.

FELLOWS.

ART. 4. Fellows shall be elected by the Council from such of the members as are professionally engaged in science, or have, by their labors, aided in advancing science. The election of fellows shall be by ballot, and a majority vote of the members of the Council at a designated meeting of the Council.

PATRONS.

ART. 5. Any person paying to the Association the sum of one thousand dollars shall be classed as a patron, and shall be entitled to all the privileges of a member and to all its publications.

HONORARY FELLOWS AND CORRESPONDING MEMBERS.

ART. 6. Honorary fellows of the Association, not exceeding three for each Section, may be elected, the nominations to be made by the Council and approved by ballot in the respective sections before election by ballot in General Session. Honorary fellows shall be entitled to all the privileges of fellows, and shall be exempt from all fees and assessments, and entitled to all publications of the Association issued after the date of their election. Corresponding members shall consist of such scientists not residing in America as may be elected by the Council, and their number shall be limited to fifty. Corresponding members shall be entitled to

CONSTITUTION.

all the privileges of members and to the annual volumes of Proceedings published subsequent to their election.

SUSPENSIONS.

ART. 7. The name of any member or fellow two years in arrears for annual dues shall be erased from the list of the Association, provided, that two notices of indebtedness, at an interval of at least three months, shall have been given; and no such person shall be restored until he has paid his arrearages or has been re-elected. The Council shall have power to exclude from the Association any member or fellow, on satisfactory evidence that said member or fellow is an improper person to be connected with the Association, or has in the estimation of the Council made improper use of his membership or fellowship.

OFFICERS.

ART. 8. No member or fellow shall take part in the organization of, or hold office in, more than one section at any one meeting.

ART. 9. The officers of the Association shall be elected by ballot by the General Committee from the fellows, and shall consist of a President, a Vice-President from each section, a Permanent Secretary, a General Secretary, a Secretary of the Council, a Treasurer, and a Secretary of each Section; these, with the exception of the Permanent Secretary and the Treasurer, shall be elected at each meeting for the following one, and, with the exception of the Treasurer and the Permanent Secretary, shall not be reeligible for the next two meetings. The term of office of the Permanent Secretary and of the Treasurer shall be five years.

PRESIDENT.

ART. 10. The President, or, in his absence, the senior Vice-President present, shall preside at all General Sessions of the Association and at all meetings of the Council. It shall also be the duty of the President to give an address at a General Session of the Association at the meeting following that over which he presided.

VICE-PRESIDENTS.

ART. 11. The Vice-Presidents shall be chairmen of their respective Sections, and of their Sectional Committees, and it

CONSTITUTION.

shall be part of their duty to give an address, each before his own Section, at such time as the Council shall determine at the meeting subsequent to that at which he presides. The Vice-Presidents may appoint temporary chairmen to preside over the sessions of their sections, but shall not delegate their other duties. The Vice-Presidents shall have seniority in order of their continuous membership in the Association.

GENERAL SECRETARY.

ART. 12. The General Secretary shall be the Secretary of all General Sessions of the Association, and shall keep a record of the business of these sessions. He shall receive the records from the Secretaries of the Sections, which, after examination, he shall transmit with his own records to the Permanent Secretary within two weeks after the adjournment of the meeting.

SECRETARY OF THE COUNCIL.

ART. 13. The Secretary of the Council shall keep the records of the Council. He shall give to the Secretary of each Section the titles of papers assigned to it by the Council. He shall receive proposals for membership and bring them before the Council.

PERMANENT SECRETARY.

ART. 14. The Permanent Secretary shall be the executive officer of the Association under the direction of the Council. He shall attend to all business not specially referred to committees nor otherwise constitutionally provided for. He shall keep an account of all business that he has transacted for the Association, and make annually a general report for publication in the annual volume of Proceedings. He shall attend to the printing and distribution of the annual volume of Proceedings, and all other printing ordered by the Association. He shall issue a circular of information to members and fellows at least three months before each meeting, and shall, in connection with the Local Committee, make all necessary arrangements for the meetings of the Association. He shall provide the Secretaries of the Association with such books and stationery as may be required for their records and business, and shall provide members and fellows with such blank forms as may be required for facilitating the business of the Association. He shall collect all assessments

CONSTITUTION.

and admission fees, and notify members and fellows of their election, and of any arrearages. He shall receive, and bring before the Council, the titles and abstracts of papers proposed to be read before the Association. He shall keep an account of all receipts and expenditures of the Association, and report the same annually at the first meeting of the Council, and shall pay over to the Treasurer such unexpended funds as the Council may direct. He shall receive and hold in trust for the Association all books, pamphlets, and manuscripts belonging to the Association, and allow the use of the same under the provisions of the Constitution and the orders of the Council. He shall receive all communications addressed to the Association during the intervals between meetings, and properly attend to the same. He shall at each meeting report the names of fellows and members who have died since the preceding meeting. He shall be allowed a salary which shall be determined by the Council, and may employ one or more clerks at such compensation as may be agreed upon by the Council.

TREASURER.

ART. 15. The Treasurer shall invest the funds received by him in such securities as may be directed by the Council. He shall annually present to the Council an account of the funds in his charge. No expenditure of the principal in the hands of the Treasurer shall be made without a unanimous vote of the Council, and no expenditure of the income received by the Treasurer shall be made without a two-thirds vote of the Council. The Treasurer shall give bonds for the faithful performance of his duty in such manner and sum as the Council shall from time to time direct.

SECRETARIES OF THE SECTIONS.

ART. 16. The Secretaries of the Sections shall keep the records of their respective Sections, and, at the close of the meeting, give the same, including the records of subsections, to the General Secretary. They shall also be the Secretaries of the sectional committees. The Secretaries shall have seniority in order of their continuous membership in the Association.

VACANCIES.

ART. 17. In case of a vacancy in the office of President, the

CONSTITUTION.

senior Vice-President shall preside, as provided in Article 10, until the General Committee can be assembled and the vacancy filled by election. Vacancies in the offices of Vice-President, Permanent Secretary, Secretary of the Council, Secretaries of the Sections, and Treasurer, shall be filled by the Council by ballot.

COUNCIL.

ART. 18. The Council shall consist of the Past Presidents, and the Vice-Presidents of the last two meetings, together with the President, the Vice-Presidents, the Permanent Secretary, the General Secretary, the Secretary of the Council, the Secretaries of the Sections, and the Treasurer of the current meeting, of one fellow elected from each Section by ballot on the first day of its meeting, of one fellow elected by each affiliated society, and one additional fellow from each affiliated society having more than twenty-five members who are fellows of the Association. The members present at any regularly called meeting of the Council, provided there are at least five, shall form a quorum for the transaction of business. The Council shall meet on the day preceding each annual meeting of the Association, and arrange the program for the first day of the sessions. The time and place of this first meeting shall be designated by the Permanent Secretary. Unless otherwise agreed upon, regular meetings of the Council shall be held in the Council room at 9 o'clock, A. M., on each day of the meeting of the Association. Special meetings of the Council may be called at any time by the President. The Council shall be the board of supervision of the Association, and no business shall be transacted by the Association that has not first been referred to, or originated with, the Council. The Council shall decide which papers, discussions, and other proceedings shall be published, and have the general direction of the publications of the Association; manage the financial affairs of the Association; arrange the business and programs for General Sessions; suggest subjects for discussion, investigation or reports; elect members and fellows; and receive and act upon all invitations extended to the Association and report the same at a General Session of the Association. The Council shall receive all reports of Special Committees and decide upon them, and only such shall be read in General

CONSTITUTION.

Session as the Council shall direct. The Council shall appoint at each meeting the following subcommittees who shall act, subject to appeal to the whole Council, until their successors are appointed at the following meeting: 1, on Papers and Reports; 2, on Members; 3, on Fellows.

GENERAL COMMITTEE.

ART. 19. The General Committee shall consist of the Council and one member or fellow elected by each of the Sections, who shall serve until their successors are elected. It shall be the duty of the committee to meet at the call of the President and elect the general officers for the following meeting of the Association. It shall also be the duty of this committee to fix the time and place for the next meeting. The Vice-President and Secretary of each Section shall be recommended to the General Committee by the Sectional Committee.

MEETINGS.

ART. 20. The Association shall hold a public meeting annually, for one week or longer, at such time and place as may be determined by vote of the General Committee, and the preliminary arrangements for each meeting shall be made by the Local Committee, in conjunction with the Permanent Secretary and such other persons as the Council may designate.

But if suitable preliminary arrangements cannot be made, the Council may afterward change the time and place appointed by the General Committee, if such change is believed advisable, by two-thirds of the members present.

ART. 21. A General Session shall be held at 10 o'clock, A. M., on the first day of the meeting, and at such other times as the Council may direct.

SECTIONS AND SUBSECTIONS.

ART. 22. The Association shall be divided into Sections, namely:—A, *Mathematics and Astronomy*; B, *Physics*; C, *Chemistry, including its application to Agriculture and the Arts*; D, *Mechanical Science and Engineering*; E, *Geology and Geography*; F, *Zoology*; G, *Botany*; H, *Anthropology*; I, *Social and Economic Science*; K, *Physiology and Experimental Medicine*. The Council shall have

CONSTITUTION.

power to consolidate any two or more Sections temporarily, and such consolidated Sections shall be presided over by the senior Vice-President and Secretary of the Sections comprising it.

SECTIONAL COMMITTEES.

ART. 23. Immediately on the organization of a Section there shall be three members or fellows elected by ballot after open nomination, who, with the Vice-President and Secretary and the Vice-President and Secretary of the preceding meeting, shall form its Sectional Committee. The Sectional Committees shall have power to fill vacancies in their own numbers. Meetings of the Sections shall not be held at the same time with a General Session. The Sectional Committee may invite distinguished foreign associates present at any meeting to serve as honorary members of said Committee.

ART. 24. The Sectional Committee of any Section may at its pleasure form one or more temporary Subsections, and may designate the officers thereof. The Secretary of a Subsection shall, at the close of the meeting, transmit his records to the Secretary of the Section.

ART. 25. No paper shall be read in any Section or Subsection until it has been placed on the program of the day by the Sectional Committee.

ART. 26. The Sectional Committees shall arrange and direct the business of their respective Sections. They shall prepare the daily programs and give them to the Permanent Secretary for printing at the earliest moment practicable. No titles of papers shall be entered on the daily programs except such as have passed the Committee. No change shall be made in the program for the day in a Section without the consent of the Sectional Committee. The Sectional Committees may refuse to place the title of any paper on the program; but every such title, with the abstract of the paper or the paper itself, must be referred to the Council with the reasons why it was refused. The Sectional Committee shall also make nominations to the General Committee for Vice-President and Secretary of their respective Sections as provided for in Article 19.

ART. 27. The Sectional Committees shall examine all papers and abstracts referred to the Sections, and they shall not place on the program any paper inconsistent with the character of

CONSTITUTION.

the Association; and to this end they have power to call for any paper, the character of which may not be sufficiently understood from the abstract submitted.

PAPERS AND COMMUNICATIONS.

ART. 28. All members and fellows must forward to the Secretary of the proper Section or to the Permanent Secretary, as early as possible, and when practicable before the convening of the Association, full titles of all the papers which they propose to present during the meeting, with a statement of the time that each will occupy in delivery, and also such abstracts of their contents as will give a general idea of their nature; and no title shall be considered by a Sectional Committee until an abstract of the paper or the paper itself has been received.

ART. 29. If the author of any paper be not ready when called upon, in the regular order of the official program, the title may be dropped to the bottom of the list.

ART. 30. Whenever practicable the proceedings and discussions at General Sessions, Sections and Subsections, shall be reported by professional reporters, but such reports shall not appear in print as the official reports of the Association unless revised by the Secretaries.

PRINTED PROCEEDINGS.

ART. 31. The Permanent Secretary shall have the Proceedings of each meeting printed in an octavo volume as soon after the meeting as possible, beginning one month after adjournment. Authors must prepare their papers or abstracts ready for the press, and these must be in the hands of the Secretaries of the Sections before the final adjournment of the meeting, otherwise only the titles will appear in the printed volume. The Council shall have power to order the printing of any paper by abstract or title only. Whenever practicable, proofs shall be forwarded to authors for revision. If any additions or substantial alterations are made by the author of a paper after its submission to the Secretary, the same shall be distinctly indicated. Illustrations must be provided for by the authors of the papers, or by a special appropriation from the Council. Immediately on publication of

CONSTITUTION.

the volume, a copy shall be forwarded to every member and fellow of the Association who shall have paid the assessment for the meeting to which it relates, and it shall also be offered for sale by the Permanent Secretary at such price as may be determined by the Council. The Council shall also designate the institutions to which copies shall be distributed.

LOCAL COMMITTEE.

ART. 32. The Local Committee shall consist of persons interested in the objects of the Association and residing at or near the place of the proposed meeting. It is expected that the Local Committee, assisted by the officers of the Association, will make all essential arrangements for the meeting, and issue a circular giving necessary particulars, at least one month before the meeting.

LIBRARY OF THE ASSOCIATION.

ART. 33. All books and pamphlets received by the Association shall be in charge of the Permanent Secretary, who shall have a list of the same printed and shall furnish a copy to any member or fellow on application. Members and fellows who have paid their assessments in full shall be allowed to call for books and pamphlets, which shall be delivered to them at their expense on their giving a receipt agreeing to make good any loss or damage, and to return the same free of expense to the Secretary at the time specified in the receipt given. All books and pamphlets in circulation must be returned at each meeting. Not more than five books, including volumes, parts of volumes, and pamphlets, shall be held at one time by any member or fellow. Any book may be withheld from circulation by order of the Council. [The Library of the Association was, by vote of the Council in 1895, placed on deposit in the Library of the University of Cincinnati, Ohio. Members can obtain the use of books by writing to the Librarian of the University Library, Cincinnati, Ohio.]

ADMISSION FEE AND ASSESSMENTS.

ART. 34. The admission fee for members shall be five dollars in addition to the annual assessment. On the election of any member as a fellow an additional fee of two dollars shall be paid.

CONSTITUTION.

ART. 35. The annual assessment for members and fellows shall be three dollars.

ART. 36. Any member or fellow who shall pay the sum of fifty dollars to the Association, at any one time, shall become a Life Member, and as such shall be exempt from all further assessments, and shall be entitled to the Proceedings of the Association. All money thus received shall be invested as a permanent fund, the income of which, during the life of the member, shall form a part of the general fund of the Association; but, after his death, shall be used only to assist in original research, unless otherwise directed by unanimous vote of the Council.

ART. 37. All fees and assessments must be paid to the Permanent Secretary, who shall give proper receipts for the same.

ACCOUNTS.

ART. 38. The accounts of the Permanent Secretary and of the Treasurer shall be audited annually by Auditors appointed by the Council.

ALTERATIONS OF THE CONSTITUTION.

ART. 39. No part of this Constitution shall be amended or annulled, without the concurrence of three-fourths of the members and fellows present in General Session, after notice given at a General Session of a preceding meeting of the Association.

MEMBERS AND FELLOWS
OF THE
AMERICAN ASSOCIATION
FOR THE
ADVANCEMENT OF SCIENCE.

(CORRECTED TO JUNE 5, 1902.)

SURVIVING FOUNDERS.

[At the Brooklyn Meeting, 1894, a resolution was unanimously adopted by which all the surviving founders of the Association who have maintained an interest in science were made Honorary Life Members of the Association in recognition of their pioneer work in American Science.]

ABBOT, SAMUEL L., Boston, Mass.

BOYÉ, MARTIN H., Coopersburg, Pa.

GIBBS, WOLCOTT, Newport, R. I.

PATRONS.

[Persons contributing one thousand dollars or more to the Association are classed as Patrons, and are entitled to the privileges of members and to the publications. The names of Patrons are to remain permanently on the list.]

THOMPSON, MRS. ELIZABETH, Stamford, Conn. (22). (Died July 1899.)

LILLY, GEN. WILLIAM, Mauch Chunk, Pa. (28). (Died Dec. 1, 1893.)

HERRMAN, MRS. ESTHER, 59 West 56th St., New York, N. Y. (29).

McMILLIN, EMERSON, 40 Wall St., New York, N. Y. (37).

HONORARY FELLOWS.

[See ARTICLE VI of the Constitution.]

*ROGERS, PROF. WILLIAM B., Boston, Mass. (1). 1881. (Born Dec. 7, 1804. Died May 30, 1882.) **B E**

*CHEVREUL, MICHEL EUGENE, Paris, France. (35). 1886. (Born Aug. 31, 1786. Died April 9, 1889.) **C**

*GENTH, DR. F. A., Philadelphia, Pa. (24). 1888. (Born May 17, 1820. Died Feb. 2, 1892.) **C E**

*HALL, PROF. JAMES, Albany, N. Y. (1). 1890. (Born in 1811. Died Aug. 7, 1898.)

MEMBERS AND FELLOWS.

- *GOULD, DR. BENJAMIN APTHORP, Cambridge, Mass. (2). 1895.
(Born Sept. 27, 1824. Died Nov. 26. 1896.) **A B**
- *LEUCKART, PROF. RUDOLF. (44). 1895. (Born in Helmstedt, Braunschweig, Germany, Oct. 7, 1823. Died in Leipzig, Feb. 7, 1898.) **F**
- *GIBBS, PROF. WOLCOTT, Newport, R. I. (1). 1896. **B C**
- *WARINGTON, ROBERT, F. R. S., Rothamsted, Harpenden, England. (40). 1899. **C**

MEMBERS AND FELLOWS.

The names designated by an asterisk (*) are those of Fellows. (See ARTICLE IV of the Constitution.) The number in parenthesis indicates the meeting at which the Member joined the Association; the date following is the year when made a Fellow; the black letters at end of line are those of the Sections to which the Member or Fellow belongs. When the name is given in small capitals, it designates that the Member or Fellow is also a Life Member. Any Member or Fellow may become a Life Member by the payment of fifty dollars. The income of the money derived from a life membership is used for the general purposes of the Association during the life of the Member; afterwards it is to be used to aid in original research. Life Members are exempt from the annual assessment, and are entitled to the publications. The names of Life Members are printed in small capitals in the regular list of Members and Fellows.

The Constitution requires that the names of all Members two years in arrears shall be omitted from the list, but their names will be restored on payment of arrearages. Members not in arrears are entitled to the publications of the Association, including the journal *Science*.

- *Abbe, Cleveland, Professor of Meteorology, Weather Bureau, U. S. Dept. Agriculture, Washington, D. C. (16). 1874. **A B**
- *Abbe, Cleveland, Jr., 2017 I St., N. W., Washington, D. C. (44). 1899. **E**
- *Abbe, Dr. Robert, 13 W. 50th St., New York, N. Y. (36). 1892.
Abbot, Francis Ellingwood, Ph.D., 43 Larch Road, Cambridge, Mass. (50). **I**
- *ABBOT, DR. SAMUEL L., 90 Mt. Vernon St., Boston, Mass. (1). 1898.
Abbott, Charles G., Smithsonian Institution, Washington, D. C. (49). **B**
- Abbott, Frank L., Professor of Physical Science, State Normal School, Greeley, Colo. (50). **B E**
- Abel, John J., Professor of Pharmacology, Johns Hopkins University, Baltimore, Md. (51). **C**
- *Abert, S. Thayer, Metropolitan Club, Washington, D. C. (30). 1891. **A B E**
- Abraham, Abraham, Brooklyn, N. Y. (43).
Acheson, Edward Goodrich, President of the International Acheson Graphite Co., Niagara Falls, N. Y. (50). **C**
- Adams, Comfort A., 13 Farrar St., Cambridge, Mass. (47).
Adams, C. C., University of Chicago, Chicago, Ill. (50). **F**
- Adams, C. E., M. D., 29 West Broadway, Bangor, Me. (43). **F**
- Adams, Edward Dean, 35 Wall St., New York, N. Y. (49).

MEMBERS AND FELLOWS.

- Adams, Ernest Kempton, 455 Madison Ave., New York, N. Y. (50). **D E**
- Adams, Frederick C., Classical High School, Providence, R. I. (50). **B C**
- Adler, I., M. D., 12 E 60th St., New York, N. Y. (49).
- *Adriance, John S., 105 E. 39th St., New York, N. Y. (39). 1895. **C**
- Ainsworth, Herman Reeve, M. D., Addison, N. Y. (51). **I K**
- Albaugh, Maurice, Secretary of the Crescent Metallic Fence Stay Co., Covington, Ohio. (51). **D**
- Albrecht, Emil Poole, Secretary of The Bourse, 1523 No. 17th St., Philadelphia, Pa. (51). **A D**
- Albree, Chester B., Mechanical Engineer, 14-30 Market St., Allegheny, Pa. (50). **D**
- *Alden, John, Pacific Mills, Lawrence, Mass. (36). 1898.
- Alderson, Victor C., Dean of the Technical College, Armour Institute of Technology, Chicago, Ill. (50). **D**
- Aldis, Owen F., 230 Monadnock Block, Chicago, Ill. (41). **H**
- *Aldrich, Wm. S., Director, Thomas S. Clarkson Memorial School of Technology, Potsdam, N. Y. (43). 1897. **D**
- Alexander, Chas. Anderson, M. E., Johnston Harvester Co., 10 Vine St., Batavia, N. Y. (50). **D**
- Alexander, Curtis, Mining Engineer, Spearfish, South Dakota. (50). **E**
- Alexander, George E., Chemist and Mining Engineer, 1736 Champa St., Denver, Colo. (50). **C D**
- Alexander, Harry, E. E., M. E., 18 and 20 W. 34th St., New York, N. Y. (50). **D**
- Aley, Robert J., Indiana Univ., Bloomington, Ind. (49).
- Alford, William V., Garrettsville, Ohio. (48). **E H**
- Allan, Chas. F., Newburgh, N. Y. (50). **B E**
- Allderdice, Wm. H., Lieutenant U. S. Navy, Navy Dept. Washington, D. C. (33). **D**
- Alleman, Gellert, Ph. D., Instructor in Chemistry, Washington University, St. Louis, Mo. (50). **C**
- Allen, C. L., Floral Park, N. Y. (49).
- Allen, Frank, 315 Dryden Road, Ithaca, N. Y. (49). **B**
- Allen, H. Jerome, M. D., 421 H St., N.E., Washington, D.-C. (51). **K**
- Allen, J. M., President of the Hartford Steam Boiler Inspection and Insurance Co., Hartford, Conn. (22). **D**
- Allen, John Robins, Asst. Prof. of Mechanical Engineering. University of Michigan, Ann Arbor, Mich. (45). **B D**
- Allen, Richard H., Chatham, N. J. (49).
- *Allen, Dr. T. F., 3 E. 48th St., New York, N. Y. (35). 1887. **G**
- Allen, Walter S., 34 S. Sixth St., New Bedford, Mass. (39). **C I**
- Allison, Charles Edward, M. D., Elysburg, Pa. (51). **K**

MEMBERS AND FELLOWS.

- Allison, Hendery, M. D., Manhattan State Hospital, East, P. O. Sta. U, New York, N. Y. (50). **K**
- Allyn, G. W., M. D., Secretary Academy of Science and Art, 515 Penn. Ave., Pittsburg, Pa. (51). **F**
- Almond, Thomas R., M. E., 83-85 Washington St., Brooklyn, N. Y. (51). **D**
- *Almy, John E., Ph. D., Instructor in Physics, University of Nebraska, Lincoln, Neb. (50). 1901. **B**
- Alpers, Wm. C., 45 West 31st St., New York, N. Y. (50). **I**
- Alsop, E. B., 541 Wood St., Pittsburg, Pa. (50). **D**
- Alspach, E. F., 455 West Sixth Ave., Columbus, O. (48). **H**
- *Alvord, Maj. Henry E., U. S. Dept. Agriculture, Washington, D. C. (29). 1882. **I**
- *Alwood, Prof. Wm. B., Agricultural and Mechanical College and Experiment Station, Blacksburg, Va. (39). 1891. **F**
- Ames, Oakes, Assistant Director of the Botanic Garden of Harvard University, North Easton, Mass. (50). **G**
- Ammons, Miss Theodosia G., Professor of Domestic Science, State Agricultural College, Fort Collins, Colo. (50). **I**
- Amundson, John A., 146 Broadway, New York, N. Y. (49).
- Amweg, Frederick James, Civil and Consulting Engineer, Box 537, Honolulu, H. T. (51). **D**
- Anders, Howard S., M. D., 1836 Wallace St., Philadelphia, Pa. (51). **K**
- Anderson, A. J. C., 127 Water St., New York, N. Y. (49).
- *Anderson, Alexander P., N. Y. Botanical Garden, Bronx Park, New York, N. Y. (45). 1899. **G**
- Anderson, Prof. Douglas S., Tulane Univ., New Orleans, La. (49). **B D**
- Anderson, Edwin Clinton, M. D., 26 Market St., Chattanooga, Tenn. (51). **K**
- Anderson, Frank, E. M., 255 Second East St., Salt Lake City, Utah, (50). **D E**
- Anderson, Frank P., Epworth, Iowa. (46).
- Anderson, J. Hartley, M. D., 4630 Fifth Ave., Pittsburg, Pa. (50). **K**
- Anderson, James Thomas, Lieutenant U. S. Army, 1112 N. Cascade Ave., Colorado Springs, Colo. (51).
- Anderson, Winslow, M. D., President of College of Physicians and Surgeons of San Francisco, 1025 Sutter St., San Francisco, Cal. (51). **K**
- Andrews, Wm. C., Associate Editor, "Street Railway Journal," Hotel Margaret, New York, N. Y. (46).
- Andrews, William Symes, care Gen'l Elec. Co., Schenectady, N. Y. (50). **D E**
- Annear, John Brothers, University of Colorado, Boulder, Colo. (50). **C**

MEMBERS AND FELLOWS.

- Anthony, Mrs. Emilia C., Gouverneur, N. Y. (47). **G**
- Anthony, Richard A., 122-124 Fifth Ave., New York, N. Y. (49).
- *Anthony, Prof. Wm. A., Cooper Union, New York, N. Y. (28).
1880. **B**
- *Appleton, John Howard, Professor of Chemistry, Brown University, Providence, R. I. (50). 1901. **C**
- Archer, George Frost, 31 Burling Slip, New York, N. Y. (50). **D**
- Armstrong, Robert, M. D., Boulder, Colo. (50). **H K**
- Arnold, Bion Joseph, 4128 Prairie Ave., Chicago, Ill. (50). **D**
- Arnold, Mrs. Francis B., 101 W. 78th St., New York, N. Y. (49).
- Arnold, Jacob H., Teacher of Natural Science, Redfield College, Redfield, South Dakota. (50). **I**
- Arnold, Ralph, Instructor in Mineralogy, Stanford University, Palo Alto, Cal. (51). **E**
- *Arthur, J. C., Lafayette, Ind. (21). 1883. **G**
- Asdale, William James, M. D., 5523 Ellsworth Ave., Pittsburg, Pa. (51). **K**
- Ashe, W. Willard, Consulting Forester, Raleigh, N. C. (47).
- Ashley, George Hall, Professor of Biology and Geology, College of Charleston, Charleston, S. C. (51). **E F**
- *Ashmead, Wm. H., Department of Insects, U. S. National Museum, Washington, D. C. (40). 1892. **F**
- Aspinwall, John, 290 Broadway, New York, N. Y. (49).
- Atkins, Prof. Martin D., Agricultural College, Mich. (48). **B**
- *Atkinson, Edward, 31 Milk St., Boston, Mass. (29). 1881. **D I**
- *Atkinson, George F., Cornell University, Ithaca, N. Y. (39).
1892. **G**
- Atkinson, John B., Earlington, Ky. (26). **D**
- *Atwater, Prof. W. O., Wesleyan Univ., Middletown, Conn. (29).
1882. **C**
- *Auchincloss, Wm. S., 45 W. 20th St., New York, N. Y. (29). 1886.
A D
- *Austen, Prof. Peter T., 80 Broad St., New York, N. Y. (44).
1896. **C**
- Austin, Dr. George M., Wilmington, Ohio. (48). **E F**
- *Avery, Elroy M., Ph. D., LL.D., 657 Woodland Hills Ave., Cleveland, Ohio. (37). 1889. **B**
- AVERY, SAMUEL P., 4 E. 38th St., New York, N. Y. (36).
- Ayer, Edward Everett, 915 Old Colony Bldg., Chicago, Ill. (37). **H**
- Ayer, James I., 5 Main St. Park, Malden, Mass. (50). **D**
- *Ayers, Howard, President Univ. of Cincinnati, Cincinnati, Ohio. (49). 1901. **F**
- Aylesworth, Barton O., President of the State Agricultural College, Fort Collins, Colo. (50). **I**
- *Ayres, Prof. Brown, Tulane University, New Orleans, La. (31).
1885. **B**

MEMBERS AND FELLOWS.

- Ayres, Horace B., U. S. Geological Survey, Washington, D. C. (40).
- Babcock, Stephen E., Civil and Hydraulic Engineer, Little Falls, N. Y. (51). **D**
- *Babcock, Prof. S. Moulton, 432 Lake St., Madison, Wis. (33). 1885. **C**
- Baerecke, John F., M. D., Professor of Biology, Stetson University, DeLand, Fla. (50). **F K**
- Bagby, J. H. C., Dept. Physical Science, Hampden-Sidney College, Hampden-Sidney, Va. (50). **B**
- Bagg, Rufus Mather, Jr., Ph. D., High School, Brockton, Mass. (49). **E**
- BAGGLEY, RALPH, Pittsburg, Pa. (50). **D**
- *Bailey, E. H. S., Professor of Chemistry, Univ. of Kansas, Lawrence, Kan. (25). 1889. **C E**
- Bailey, Marshall Henry, M. D., 47 Brattle St., Cambridge, Mass. (50). **F K**
- *Bailey, Solon Irving, Associate Prof. Astronomy, Harvard Observatory, Cambridge, Mass. (50). 1901. **A**
- Bain, Samuel M., Professor of Botany, University of Tennessee, Knoxville, Tenn. (50). **G**
- Baker, A. G., Springfield, Mass. (44).
- *Baker, Frank, M. D., 1728 Columbia Road, Washington, D. C. (31). 1886. **F H K**
- Baker, Frederic, 815 Fifth Ave., New York, N. Y. (49).
- Baker, Hugh P., Bureau of Forestry, U. S. Dept. Agriculture, Washington, D. C. (51). **G**
- Baker, James H., President of the University of Colorado, Boulder, Colo. (50). **I**
- *Baker, Marcus, U. S. Geol. Survey, Washington, D. C. (30). 1882. **A**
- Balch, Edwin Swift, 1412 Spruce St., Philadelphia, Pa. (51). **E H**
- Balch, Francis Noyes, Prince St., Jamaica Plain, Mass. (50). **F**
- Balch, Samuel W., 41 Wall St., New York, N. Y. (43).
- Baldwin, Mrs. G. H., 3 Madison Ave., Detroit, Mich. (34). **H**
- Baldwin, Herbert B., 9-11 Franklin St., Newark, N. J. (43).
- *Baldwin, Prof. J. Mark, Princeton, N. J. (46). 1898. **H**
- *BALDWIN, HON. SIMEON E., Associate Judge of Supreme Court of Errors, New Haven, Conn. (50). 1901. **I**
- *BALDWIN, S. PRENTISS, 736 Prospect St., Cleveland, Ohio. (47). 1900. **E**
- Ball, Carleton R., U. S. Dept. Agriculture, Washington, D. C. (49). **G**
- Ball, Elmer Darwin, Assistant Professor of Zoology, Agricultural College, Fort Collins, Colo. (50). **F**
- Ball, Miss Helen Augusta, 43 Laurel St., Worcester, Mass. (50). **F**

MEMBERS AND FELLOWS.

- Ballard, C. A., Curator of Museum, State Normal School, Moorhead, Minn. (51).
- *Ballard, Harlan H., 50 South St., Pittsfield, Mass. (31). 1891. **E F**
- Balliet, Thomas M., Supt. of Schools, Springfield, Mass. (48). **H I**
- Bancroft, Alonzo C., Elma, New York. (41).
- Bancroft, Frank Watts, Ph. D., Instructor in Physiology, University of California, Berkeley, Cal. (50). **F K**
- Bancroft, John Sellers, M. E., 3310 Arch St., Philadelphia, Pa. (51). **D**
- *Bancroft, Wilder Dwight, Professor of Chemistry, Cornell University, Ithaca, N. Y. (50). 1901. **C**
- BANGS, LEMUEL BOLTON, M. D., 127 E. 34th St., New York, N. Y. (36).
- *Bangs, Outram, 240 Beacon St., Boston, Mass. (47). 1900. **F**
- Banks, William C., Electrician, Gordon Battery Co., 439 E. 144th St., New York, N. Y. (50). **D**
- Barber, Amzi L., 7 E. 42d St., New York, N. Y. (49).
- *Barbour, Prof. Erwin Hinckley, Univ. of Nebraska, Lincoln, Neb. (45). 1898. **E**
- *Bardeen, Charles Russell, Anatomical Laboratory, Wolfe and Monument Sts., Baltimore, Md. (50). 1901. **F K**
- BARGE, B. F., Mauch Chunk, Pa. (33).
- Barkan, Adolph, M. D., LL.D., 14 Grant Ave., San Francisco, Cal. (51). **K**
- *BARKER, PROF. G. F., 3909 Locust St., Philadelphia, Pa. (13). 1875. **B C**
- Barker, Mrs. Martha M., 42 Eleventh St., Lowell, Mass. (31). **E H**
- *Barnard, Edward E., Yerkes Observatory, Williams Bay, Wis. (26). 1883. **A**
- Barnes, Albert, Clemson College, S. C. (49). **D**
- *Barnes, Charles Reid, Ph. D., Univ. of Chicago, Chicago, Ill. (33). 1885. **G**
- Barnes, Edward W., Box 446, New York, N. Y. (49).
- Barnes, Lemuel Call, D. D., 310 Oakland Ave., Pittsburg, Pa. (51). **F**
- Barnett, Robert Crary, care Vera Cruz and Pacific Ry., Orizaba, Mexico. (51). **D**
- Barnhart, Arthur M., 185 Monroe St., Chicago, Ill. (42).
- Barnhart, John H., M. D., Tarrytown, N. Y. (49). **G**
- Barnsley, George Thomas, C. E., 64 Water St., Pittsburg, Pa. (51). **D**
- *Barnum, Miss Charlotte C., Ph. D., U. S. Coast and Geodetic Survey, Washington, D. C. (36). 1896. **A**
- Barr, Charles Elisha, Professor of Biology, Albion College, Albion, Mich. (50). **F**
- Barr, John Henry, Professor of Machine Design, Cornell University, Ithaca, N. Y. (51). **D**

MEMBERS AND FELLOWS.

- Barrell, Joseph, Asst. Professor of Geology, Lehigh University, South Bethlehem, Pa. (51). **E**
- Barrie, Dr. George, 1629 Fourteenth St., N.W., Washington, D. C. (49). **H I**
- Barringer, Daniel Moreau, Geologist and Mining Engineer, 460 Bullitt Building, Philadelphia, Pa. (50). **D E**
- Barrows, Franklin W., M. D., 45 Park St., Buffalo, N. Y. (47). **F**
- *Barrows, Walter B., Agricultural College, Mich. (40). 1897. **F**
- *Bartlett, Prof. Edwin J., Dartmouth College, Hanover, N. H. (28). 1883. **C**
- Bartlett, Francis, 40 State St., Boston, Mass. (50). **I**
- *Bartlett, John R., Captain, U. S. N., 1622 21st St., N.W., Washington, D. C. (30). 1882. **B E**
- *Bartley, Elias H., M. D., 21 Lafayette Ave., Brooklyn, N. Y. (33). 1894. **C**
- *Barton, G. E., 212 North 3d St., Millville, N. J. (46). 1898. **C**
- *Barton, George Hunt, Dept. of Geology, Mass. Inst. Tech., Boston, Mass. (47). 1900. **E**
- Barton, Philip Price, E. E., Sup't Niagara Falls Power Co., 127 Buffalo Ave., Niagara Falls, N. Y. (50). **D E**
- *Barton, Samuel M., Ph. D., The Univ. of the South, Sewanee, Tenn. (43). 1899. **A**
- Bartow, Edward, Ph. D., Kansas State University, Lawrence, Kan. (47). **C**
- *Barus, Carl, Ph. D., Wilson Hall, Brown Univ., Providence, R. I. (33). 1887. **B**
- Barwell, John William, Waukegan, Ill. (47).
- *Bascom, Miss Florence, Bryn Mawr College, Bryn Mawr, Pa. (42). 1897. **E**
- Bashore, Dr. Harvey B., West Fairview, Pa. (46). **E**
- *Baskerville, Charles, Univ. of North Carolina, Chapel Hill, N. C. (41). 1894. **C E**
- Baskett, James Newton, Mexico, Mo. (50). **F I**
- Bassett, Carroll Phillips, C. E., Ph. D., Civil and Consulting Engineer, Summit, N. J. (51). **D**
- Bates, Charles B., M. D., 27 Everett St., Cambridge, Mass. (51). **C K**
- Bates, Rev. John Mallery, Callaway, Neb. (51). **G I**
- Bauder, Arthur Russell, Instructor in Physics, Boardman High School, New Haven, Conn. (50). **B**
- *Bauer, Louis A., Ph. D., U. S. C. and G. Survey, Washington, D. C. (40). 1892. **A**
- *Bausch, Edw., P. O. Drawer 1033, Rochester, N. Y. (26). 1883. **A B C F**
- Bausch, Henry, P. O. Drawer 1033, Rochester, N. Y. (41).
- Baxter, James Phinney, President, Maine Historical Society, Portland, Maine. (50). **H I**

MEMBERS AND FELLOWS.

- Beach, Miss Alice M., 1015 W. Illinois St., Urbana, Ill. (50). **F**
 Beach, Charles Coffing, M. D., 54 Woodland St., Hartford, Conn. (50). **K**
 Beach, Harry Wilber, Manufacturer of Wood-working Machinery, Montrose, Pa. (50). **D**
 Beach, Henry Harris Aubrey, M. D., 28 Commonwealth Ave., Boston, Mass. (50). **F K**
 *Beach, Spencer Ambrose, N. Y. Exper. Station, Geneva, N. Y. (41). 1900. **G**
 Beahan, Willard, Division Engineer, C. & N. W. Ry., 220 W. 6th St., Winona, Minn. (51). **D**
 *Beal, Wm. James, Ph. D., Professor of Botany, Agricultural College, Mich. (17). 1880. **G**
 *Beardsley, Arthur E., Professor of Biology, Colorado State Normal School, Greeley, Colo. (50). 1901. **F**
 Beates, Henry, Jr., M. D., President of State Board of Medical Examiners, 1504 Walnut St., Philadelphia, Pa. (51). **K**
 Becher, Franklin A., 234 Oneida St., Milwaukee, Wis. (41). **A I**
 Beck, Carl, M. D., Visiting Surgeon, St. Mark's Hospital, 37 E. 31st St., New York, N. Y. (51). **K**
 *Becker, Dr. Geo. F., U. S. Geol. Survey, Washington, D. C. (36). 1890. **E**
 Beckwith, Miss Florence, 394 Alexander St., Rochester, N. Y. (45). **G**
 *Bedell, Frederick, Ph. D., Cornell Univ., Ithaca, N. Y. (41). 1894. **A B**
 Beede, Joshua William, Indiana University, Bloomington, Ind. (50). **E**
 Beekman, Gerard, 47 Cedar St., New York, N. Y. (49).
 Beers, M. H., 410 Broadway, New York, N. Y. (50). **I**
 Behrend, Bernhard Arthur, C. E., E. E., Station H. Cincinnati, Ohio. (50). **D E**
 *Bell, Alex. Graham, 1331 Conn. Ave., N.W., Washington, D. C. (26). 1879. **B H I**
 *Bell, Alex. Melville, 1525 35th St., Washington, D. C. (31). 1885. **H**
 BELL, C. M., M. D., 320 Fifth Ave., New York, N. Y. (36).
 Bell, George, Mineralogist, 200 S. Washington Ave., Denver, Colo. (50). **E G**
 Bell, Guido, M. D., 431 E. Ohio St., Indianapolis, Ind. (51). **K**
 *Bell, Robert, M. D., LL.D., F. R. S., Geol. Survey, Ottawa, Can. (38). 1889. **E F**
 Bellows, Horace M., M. D., Huntingdon Valley, Pa. (51). **K**
 Belmont, August, 23 Nassau St., New York, N. Y. (50). **I**
 *Beman, Wooster W., 813 E. Kingsley St., Ann Arbor, Mich. (34). 1886. **A**

MEMBERS AND FELLOWS.

- Benedict, James H., 14 E. 70th St., New York, N. Y. (49).
- *BENJAMIN, MARCUS, U. S. National Museum, Washington, D. C. (27). 1887. **C I**
- *Benjamin, Rev. Raphael, Hotel Premier, E. 72nd St., New York, N. Y. (34). 1887. **E F G H**
- *Benneson, Miss Cora Agnes, A. M., LL. B., 4 Mason St., Cambridge, Mass. (47). 1899. **H I**
- Bennett, Charles W., Coldwater, Mich. (50). **E**
- Bennett, Henry C., 4th Flat, 1692 Broadway, New York, N. Y. (43).
- Bennett, Rev. N. E., Wilmington, Ohio. (47). **A**
- Bennett, William Z., Ph. D., Director of Chemical Laboratory, Univ. of Wooster, Wooster, Ohio. (48). **C**
- Benson, Frank Sherman, 214 Columbia Heights, Brooklyn, N. Y. (49).
- Bentley, William B., Ohio University, Athens, Ohio. (51). **C**
- Bentley, Wilson A., Nashville, Vt. (48).
- Bentley, Wray Annin, Instructor in Metallurgy, School of Applied Science, Columbia University, New York, N. Y. (50). **E**
- Benton, John Robert, Ph. D., Asst. in Physics, Cornell University, Ithaca, N. Y. (51). **B**
- Benton, Josiah H., Jr., Ames Building, Boston, Mass. (50). **I**
- Bergey, David H., S. E. cor. 34th and Locust Sts. Philadelphia, Pa. (48).
- *Bergström, John Andrew, Ph. D., Associate Professor of Psychology and Pedagogy, Indiana University, Bloomington, Ind. (50). 1901. **I**
- Berkeley, Wm. N., Ph. D., Box 65, San Juan, Porto Rico. (49). **C**
- Berkey, Charles Peter, Ph. D., Instructor in Mineralogy, University of Minnesota, Minneapolis, Minn. (50). **E**
- Bermann, I., M. D., 1010 I St., N.W., Washington, D. C. (49). **H**
- Bernays, Augustus Charles, M. D., 3623 Laclede Ave., St. Louis, Mo., (50). **F K**
- Bernheimer, Charles L., 43 E. 63rd St., New York, N. Y. (49).
- Berry, Daniel, M. D., Carmi, Ill. (41). **B C E**
- Berry, Edgar H., Draftsman in charge Equipment Department, Navy Yard, Brooklyn, N. Y. (50). **D**
- Berry, Edward W., News Building, Passaic, N. J. (50). **I**
- Berry, John Wilson, C. E., Pittston, Pa. (47).
- *Bessey, Charles Edwin, Ph. D., LL.D., Univ. of Nebraska, Lincoln, Neb. (21). 1880. **G**
- *Bessey, Ernst A., U. S. Dep't Agriculture, Washington, D. C. (49). 1901. **G**
- Bessey, J. Mortimer, M. D., 1814 Adams St., Toledo, Ohio. (51). **K**
- Bethea, Solomon Hix, U. S. Attorney, Chicago Club, Chicago, Ill. (50). **I**

MEMBERS AND FELLOWS.

- Bevier, Miss Isabel, Univ. of Illinois, Urbana, Ill. (46). **C**
- *Beyer, Prof. Samuel W., Iowa Agricultural College, Ames, Iowa. (47). 1900. **E**
- *Bickmore, Prof. Albert S., Amer. Mus. Nat. History, Central Park, New York, N. Y. (17). 1880. **H**
- Biddle, James G., 1024 Stephen Girard Building, Philadelphia, Pa. (33).
- Bien, Julius, 140 Sixth Ave., New York, N. Y. (34). **E H**
- Bierly, Prof. H. E., State Seminary, Tallahassee, Fla. (49). **H**
- Bierwirth, Juilus C., M. D., 137 Montague St., Brooklyn, N. Y. (51). **K**
- *Bigelow, Prof. Frank H., U. S. Weather Bureau, Washington, D. C. (36). 1888. **A**
- Bigelow, Maurice Alpheus, Ph. D., Instructor in Biology, Teachers' College, Columbia Univ., New York, N. Y. (51). **F**
- Bigelow, Samuel Lawrence, Ph. D., Asst. Professor of General Chemistry, University of Michigan, Ann Arbor, Mich. (51). **C**
- Biggar, Hamilton F., M. D., 176 Euclid Ave., Cleveland, Ohio. (40). **B F**
- Biggs, Charles, 13 Astor Place, New York, N. Y. (50). **I**
- Bigney, Andrew J., Professor of Biology and Geology, Moores Hill College, Moores Hill Ind. (50). **E F**
- Billings, Miss E., 279 Madison Ave., New York, N. Y. (50). **I**
- BISHOP, HEBER R., Mills Building, New York, N. Y. (36).
- Bishop, L. B., M. D., 356 Orange St., New Haven, Conn. (50). **I**
- Bissell, Leslie Dayton, Ph. D., Hotchkiss School, Lakeville, Conn. (50). **B**
- *BIXBY, MAJOR W. H., Corps of Engineers, U. S. A., U. S. Engineer Office, Jones Bldg., Detroit, Mich. (34). 1892. **D**
- Black, Newton Henry, 10 Westerly St., Roxbury, Mass. (50). **B**
- Blackall, Clarence Howard, Architect, 1 Somerset St., Boston, Mass. (50). **D**
- Blackburn, Joseph E., State Dairy and Food Commissioner, Columbus, Ohio, (50). **F I**
- Blackmar, Frank Wilson, Professor of Sociology and Economics, University of Kansas, Lawrence, Kan. (50). **H I**
- Blackmore, Henry S., 206 S. 9th Ave., Mount Vernon, N. Y. (49).
- *Blair, Andrew Alexander, 406 Locust St., Philadelphia, Pa. (44). 1896. **C**
- *Blake, Clarence J., M. D., 226 Marlborough St., Boston, Mass. (24). 1877. **B F**
- *Blake, Edwin Mortimer, 1910 Addison St., Berkeley, Cal. (43). 1901. **A**
- *Blake, Francis, Auburndale, Mass. (23). 1874. **A B**
- Blake, Fred. C., Boulder, Colo. (50). **C**
- Blake, John Bapst, M. D., 302 Beacon St., Boston, Mass. (50). **F K**

MEMBERS AND FELLOWS.

- Blake, Joseph A., M. D., 601 Madison Ave., New York, N. Y. (50). **K**
- Blakeman, Mrs. Birdseye, 9 E. 44th St., New York, N. Y. (49).
- Blakeslee, Olin Safford, Magnolia, Colo. (50). **B D E**
- Bland, John Carlisle, Engineer of Bridges, Penna. Lines West of Pittsburg, 1003 Penn Ave., Pittsburg, Pa. (51). **D**
- Blankinship, Joseph William, Ph. D., Professor of Botany, Montana State College, Bozeman, Montana. (51). **G**
- Blasdale, Walter Charles, Ph. D., Instructor in Chemistry, University of California, Berkeley, Cal. (50). **C**
- Blauvelt, Harrington, Mining Engineer, Prescott, Arizona, (51). **D E**
- *Bleile, Albert M., M. D., State University, Columbus, Ohio. (37). 1896. **F**
- BLISH, W. G., Niles, Mich. (33). **B D**
- Bliss, Charles B., Ph. D., The Elmer Gates Laboratory of Psychology and Psychurgy, Chevy Chase, Md. (49). **H I**
- Bliss, Hon. Cornelius N., 117 Duane St., New York, N. Y. (49).
- Bloodgood, John H., 6 W. 40th St., New York, N. Y. (49).
- BLOUNT, HENRY FIRCH, "The Oaks," Washington, D. C. (32). **B I**
- Boas, Emil L., 37 Broadway, New York, N. Y. (50). **I**
- *Boas, Dr. Franz, Am. Mus. Nat. History, Central Park, New York, N. Y. (36). 1888. **H I**
- *Bodine, Prof. Donaldson, Wabash College, Crawfordsville, Ind. (45). 1899. **E F**
- *Bogert, Marston Taylor, Havenmeyer Hall, Columbia Univ., New York, N. Y. (47). 1900. **C**
- Boggs, Lemuel Stearns, care Sargent & Lundy, 1000 Isabella Bld'g, Chicago, Ill. (50). **D**
- Boies, Henry Martyn, President Moosic Powder Co., 530 Clay Ave., Scranton, Pa. (50). **C**
- Bolles, Newton Alden, 1457-59 Ogden St., Denver, Colo. (50). **C**
- *Bolley, Henry L., Agricultural College, North Dakota. (39). 1892. **G**
- *BOLTON, DR. H. CARRINGTON, Cosmos Club, Washington, D. C. (17). 1875. **C**
- *Bolton, Thaddeus L., Ph. D., Dept. Philosophy, University of Nebraska, Lincoln, Neb. (50). 1901. **H I**
- Bond, Fred, State Engineer, Cheyenne, Wyoming. (50). **D**
- *Bond, Geo. M., The Pratt & Whitney Co., Hartford, Conn. (33). 1885. **D**
- Bond, R. I., M. D., Hartshorne, Ind. Ter. (50). **K**
- *Bookman, Samuel, Ph. D., 9 E. 62nd St., New York, N. Y. (47). 1900. **C**
- Boon, John Daniel, Professor of Physics, Chemistry and Geology, John Tarleton College, Stephenville, Texas. (50). **B C E**

MEMBERS AND FELLOWS.

- Booraem, J. V. V., 204 Lincoln Place, Brooklyn, N. Y. (36).
 Booth, Edward, Instructor in Chemistry, Univ. of California, Berkeley, Cal. (50). **C**
- *Booth, Miss Mary A., 60 Dartmouth St., Springfield, Mass. (34). 1894. **F G I**
- Bossi, Arnold L., Ph. D., Chemist and Colorist, Manchester Mills, Manchester, N. H. (50). **C**
- Boston, L. Napoleon, M. D., 1531 S. Broad St., Philadelphia, Pa. (51). **K**
- Boucek, Anthony J., M. D., 624 Chestnut St., Allegheny, Pa. (51). **K**
- *Bouscaren, Louis Frederic Gustav, Chief Enigneer, Water Works Commission, City Hall, Cincinnati, Ohio. (50). 1901. **D**
- *Bouton, Charles Leonard, Instructor in Mathematics, Harvard University, Cambridge, Mass. (50). 1901. **A**
- Boutwell, John Mason, U. S. Geol. Survey, Washington, D. C. (46). **E**
- *Bowditch, Charles P., 28 State St., Boston, Mass. (43). 1897. **H**
- Bowditch, Miss Charlotte, Pond St., Jamaica Plain, Mass. (50). **I**
- *Bowditch, Prof. H. P., Jamaica Plain, Mass. (28). 1880. **B F H**
- Bowker, R. R., 28 Elm St., New York, N. Y. (43). **B**
- Bowlus, E. Lingan, Professor of Biology, Mt. Union College, Alliance, Ohio. (50). **F**
- Bowman, Joseph H., Resident Engineer, Vera Cruz and Pacific Ry., Apartado 21, Cordoba, Mexico. (50). **D**
- Bownocker, Prof. J. A., Ohio State University, Columbus, Ohio. (48). **E**
- *Bowser, Prof. E. A., Rutgers College, New Brunswick, N. J. (28). 1881.
- *Boyd, James E., Ohio State Univ., Columbus, Ohio. (46). 1899. **B**
- *BOYE, MARTIN H., M. D., Coopersburg, Pa. (1). 1896. **C**
- *Brace, Prof. D. B., Univ. of Nebraska, Lincoln, Neb. (48). 1900.
- BRACKENRIDGE, GEORGE W., San Antonio, Texas, (41). **I**
- Brackett, Byron B., Ph. D., Rutgers College, New Brunswick, N. J. (46). **B**
- *Brackett, Prof. C. F., Princeton University, Princeton, N. J. (19). 1875. **B**
- Brackett, Frank Parkhurst, Professor of Mathematics, Pomona College, Claremont, Cal. (50). **A**
- *Brackett, Richard N., Clemson College, S. C. (37). 1891. **C E**
- Bradford, Prof. Joseph N., Ohio State Univ., Columbus, Ohio. (48).
- *Bradford, Royal B., Commander, U. S. N., Navy Dept., Washington, D. C. (31). 1891. **B D**
- BRADLEY, ARTHUR C., Newport, N. H. (43).
- Bradley, Charles S., 44 Broad St., New York, N. Y. (40).
- Bradley, Charles Whiting, 1064 Ellicott Square, Buffalo, N. Y. (51). **D**

MEMBERS AND FELLOWS.

- BRADLEY, MILTON, Springfield, Mass. (44). **B**
- BRADLEY, M. J., 373 Fulton St., Brooklyn, N. Y. (43).
- Bradley, Walter Parke, Ph. D., Professor of Chemistry, Wesleyan University, Middletown, Conn. (50). **C**
- Bramwell, Geo. W., 335 Broadway, New York, N. Y. (43). **D**
- *Branner, Prof. John C., Stanford University, Cal. (34). 1886. **E F**
- Brasefield, Stanley E., Instructor in Mathematics, Lafayette College, Easton, Pa. (50). **A**
- *Brashear, John A., Allegheny, Pa. (33). 1885. **A B D**
- Brassill, Miss Sarah Ellen, South Weymouth, Mass. (47). **F G**
- Braunnagel, Jules L. A., M. D., P. O. Box 925, San Antonio, Texas. (50). **F**
- *Bray, William L., Professor of Botany, Univ. of Texas, Austin, Texas. (49). 1901. **G**
- Brayton, Sarah H., M. D., The Hereford, Evanston, Ill. (33).
- Brett, George P., Darien, Conn. (49).
- Brewer, Charles Edward, Professor of Chemistry, Wake Forest College, Wake Forest, N. C. (50). **C**
- *Brewer, Prof. Wm. H., 418 Orange St., New Haven, Conn. (20). 1875. **E F I**
- Brewster, Frank H., M. E., Birmingham Iron Foundry, P. O. Box 418, Derby, Conn. (51). **D**
- Brice, Judge Albert G., 901 Hennen Bldg., New Orleans, La. (32). **H**
- Bridge, Norman, M. D., 100 Grand Ave., Pasadena, Cal. (51). **K**
- Briggs, Edward Cornelius, Harvard Medical School, Boston, Mass. (50). **F K**
- *Briggs, Lyman J., U. S. Dept. Agriculture, Washington, D. C. (48). 1901. **B**
- Briggs, Wallace Alvin, M. D., 1300 I St., Sacramento, Cal. (51). **K**
- *Brigham, Albert Perry, Professor of Geology, Colgate Univ., Hamilton, N. Y. (41). 1900. **E**
- Brill, George M., Consulting Engineer, 1134 Marquette Building, Chicago, Ill. (51). **D**
- Bristol, John I. D., 1 Madison Ave., New York, N. Y. (49).
- *Bristol, Wm. H., Stevens Institute, Hoboken, N. J. (36). 1894. **A B D**
- *Britton, N. L., Ph. D., N. Y. Botanical Garden, Bronx Park, New York, N. Y. (29). 1882. **E G**
- Britton, Wiley, Special Pension Examiner, Springfield, Mo. (40). **F**
- Brodie, Paul Thomas, Professor of Mathematics, Clemson College, Clemson College, S. C. (50). **A**
- Bronson, Dr. E. B., 123 W. 34th St., New York, N. Y. (49).
- Brooks, Albert A., High School, Kansas City, Kan. (50). **F G**
- Brooks, Rev. Earle Amos, 161 Laidley St., Charleston, W. Va. (50). **F**

MEMBERS AND FELLOWS.

- Brooks, Morgan, Professor of Electrical Engineering, Univ. of Illinois, Urbana, Ill. (50). **D**
- Brooks, Prof. Wm. P., Amherst, Mass. (38). **CF**
- *Brooks, Wm. R., D. Sc., Director Smith Observatory, Geneva, N. Y. (35). 1886. **ABDG**
- Brown, Amos Peaslee, Ph. D., Assistant Professor of Geology and Mineralogy, Univ. of Pennsylvania, Philadelphia, Pa. (50). **E**
- Brown, Arthur Erwin, Secy. Zoological Society of Philadelphia, 1208 Locust St., Philadelphia, Pa. (51). **F**
- Brown, Elisha Rhodes, President Stafford Savings and National Banks, 50 Silver St., Dover, N. H. (50). **I**
- Brown, George S., M. D., 2220 1st Ave. Birmingham, Ala. (51). **K**
- Brown, Glenn V., Bradford, Pa. (51). **BCE**
- Brown, Harold W., Lehigh Univ., So. Bethlehem, Pa. (48). **BC**
- BROWN, JOSEPH STANFORD, 241 S. 5th St., Reading Pa. (50). **D**
- Brown, Newton H., Delaware College, Newark, Delaware. (48). **BD**
- Brown, Philip King, M. D., 1303 Van Ness Ave., San Francisco, Cal. (51). **K**
- *Brown, Robert, Yale University Observatory, New Haven, Conn. (11). 1874. **A**
- *Brown, Mrs. Robert, Observatory Place, New Haven, Conn. (17). 1874.
- Brown, Robert Marshall, 68 Kirkland St., Cambridge, Mass. (48).
- Brown, Samuel B., Morgantown, W. Va. (40). **E**
- Brown, Stewardson, Germantown, Pa. (50). **I**
- Brown, S. J., U. S. Naval Academy, Annapolis, Md. (49). **A**
- Brown, W. L., 42 West 72d St., New York, N. Y. (50). **I**
- Brownell, Silas B., 71 Wall St., New York, N. Y. (36).
- Browning, Charles Clifton, M. D., Highland, Cal. (51). **K**
- Browning, Philip Embury, Kent Chemical Laboratory, Yale University, New Haven, Conn. (46). **C**
- Bruggerhof, F. W., 36 Cortlandt St., New York, N. Y. (49).
- *Brühl, Gustav, cor. John and Hopkins Sts., Cincinnati, Ohio. (28). 1886. **H**
- Brundage, Albert H., M. D., 1153 Gates Ave., Brooklyn, N. Y. (43). **FGH**
- Bruner, Henry Lane, Ph. D., Professor of Biology, Butler College, Indianapolis, Ind. (50). **F**
- *Bruner, Lawrence, Professor of Entomology, Univ. of Nebraska, Lincoln, Neb. (50). 1901. **F**
- BRUNTON, DAVID WILLIAM, Mining Engineer, 865 Grant Ave., Denver, Colo. (50). **DE**
- *Brush, Charles F., 1003 Euclid Ave., Cleveland, Ohio. (35). 1886. **B**
- *BRUSH, PROF. GEORGE J., Yale Univ., New Haven, Conn. (4). 1874. **CE**

MEMBERS AND FELLOWS.

- *Bryan, Prof. William L., Indiana Univ., Bloomington, Ind. (49).
1900. **H**
- Bryant, Miss D. L., 218 Ashe St., Greensboro, N. C. (42.) **E**
- Bryant, Henry G., 2013 Walnut St., Philadelphia, Pa. (51). **E**
- Bryson, Andrew, C. E., Brylgon Foundry, Reading., Pa. (51). **D**
- Buchanan, James Isaac, Vice-President Pittsburg Trust Co., 6108
Walnut St., Pittsburg, Pa. (51). **I**
- Buchholz, Carl Waldemar, Chief Engineer, Erie R.R. Co., 21
Cortlandt St., New York, N. Y. (51). **D E**
- *Buchner, Edward Franklin, Clark University, Worcester, Mass.
(49). 1901. **H**
- *Buckhout, W. A., State College, Pa. (20). 1881. **F**
- Buckingham, Charles L., 195 Broadway, New York, N. Y. (28).
- Buffum, Burt C., Professor of Agriculture, Agricultura College,
Fort Collins, Colo. (42). **G**
- Buist, John Robinson, M. D., City Board of Health, Nashville,
Tenn. (50). **K**
- *Bull, Prof. Storm, University of Wisconsin, Madison, Wis. (44).
1897. **D**
- Bullard, Warren Gardner, Ph. D., Associate Professor of Mathe-
matics, Syracuse University, Syracuse, N. Y. (50). **A**
- Bullene, Mrs. Emma F. Jay, 1431 Court Place, Denver, Colo. (50). **H**
- *Bumpus, H. C., Am. Mus. Nat. Hist., New York, N. Y. (49).
1900.
- Bunker, Henry A., M. D., 158 Sixth Ave., Brooklyn, N. Y. (50). **I**
- Bunn, J. F., Attorney at Law, Tiffin, Ohio, (51). **B**
- *Burbank, Luther, Santa Rosa, Cal. (50). 1901. **G**
- Burbidge, Frederick, 510 Empire State Building, Spokane, Wash.
(50). **D E**
- Burdell, W. J., M. D., Lugoff, S. C., (51). **K**
- *Burgess, Edward S., 11 W. 88th St., New York, N. Y. (47). 1901. **G**
- *Burgess, Dr. Thomas J. W., Medical Supt. Protestant Hospital
for the Insane, Montreal, Can. (38). 1889. **G**
- Burgwyn, Collinson Pierrepont Edwards, Civil and Consulting
Engineer, 819 Main St., Richmond, Va. (51). **D**
- Burke, M. D., C. E., 404 Pike Bldg., Cincinnati, Ohio. (50). **A B C**
D E
- Burke, Robert E., Instructor in Chemistry, Mechanic Arts High
School, Boston, Mass. (50). **C**
- Burnham, Edward J., Manchester, N. H. (47). **F**
- Burnham, George, Jr., C. E., Burnham, Williams & Co., Baldwin
Locomotive Works, 214 N. 34th St. Philadelphia, Pa. (51). **D**
- *Burr, Prof. William H., Columbia University, New York, N. Y.
(31). 1883.
- Burrell, Herbert Leslie, M. D., 22 Newbury St., Boston, Mass.
(51). **K**

MEMBERS AND FELLOWS:

- Burroughs, Paul R., 1160 27th St., Des Moines, Iowa. (50). **C**
- *Burt, Edward Angus, Ph. D., Professor of Natural History, Middlebury College, Middlebury, Vt. (50). 1901. **G**
- Burton, Prof. Alfred E., Mass. Inst. Technology, Boston, Mass. (40). **E**
- Burton, Standish Barry, Civil and Mining Engineer, Saltillo, Coahuila, Mexico. (51). **D**
- Busch, Frederick Carl, M. D., 145 Allen St., Buffalo, N. Y. (49).
- Bush-Brown, Henry Kirke, Sculptor, Newburgh, N. Y. (50). **E I**
- Bush, John C. F., M. D., Wahoo, Neb. (51). **K**
- *Butler, Amos W., Secretary Board of State Charities, Indianapolis, Ind. (30). 1885. **F H**
- Butler, Frank Edward, President of Grayson College, White-wright, Texas. (50). **I**
- Butler, Matthew Joseph, Civil Engineer, Charlottetown, Prince Edward Island, Canada. (51). **D**
- Butterfield, Arthur Dexter, Assistant Professor of Mathematics, University of Vermont, Burlington, Vt. (50). **A D**
- Butterworth, Irvin, Denver Gas and Electric Co., Denver, Colo. (50). **B**
- Butts, Edward Pontany, C. E., Chief Engineer, Am. Writing Paper Co., Holyoke, Mass. (51). **D**
- Byrnes, Owen, Mining Engineer, P. O. Box 131, Marysville, Montana. (51). **D E**
- Cabot, Samuel, Manufacturing Chemist, 70 Kilby St., Boston, Mass. (50). **C**
- Cady, Walter G., Ph. D., 127 Power St., Providence, R. I. (49). **B**
- *Cain, William, Professor of Mathematics, University of North Carolina, Chapel Hill, N. C. (50). 1901. **A D**
- *Cajori, Florian, Professor of Mathematics, Colorado College, Colorado Springs, Colo. (50). 1901. **A**
- Calder, George, 105 East 22d St., New York, N. Y. (50).
- *Caldwell, Prof. Francis C., Ohio State University, Columbus, Ohio. (46). 1898. **B D**
- *Caldwell, Prof. George C., Cornell University, Ithaca, N. Y. (23) 1875. **C**
- Caldwell, Prof. Otis W., State Normal School, Charleston, Ill. (49). **G**
- *Calkins, Gary N., Columbia University, New York, N. Y. (49). 1901. **F**
- Calkins, Marshall, M. D., 14 Maple St., Springfield, Mass. (29).
- Calvert, Philip P., Ph. D., Instructor in Zoology, Biological Hall, University of Pennsylvania, Philadelphia, Pa. (50). **F**
- Calvert, Prof. Sidney, Univ. of Missouri, Columbia, Mo. (47). **C**
- *Calvin, Prof. Samuel, Dir. Iowa Geol. Surv., Iowa City, Iowa. (37). 1889. **E F**

MEMBERS AND FELLOWS.

- Came, Virgil M., 315 Quincy Building, Denver, Colo. (50). **E**
- *Cameron, Frank K., Ph. D., Chemist, Bureau of Soils, U. S. Dept. Agriculture, Washington, D. C. (49). 1901. **C**
- Cammann, Hermann H., 43 W. 38th St., New York, N. Y. (49).
- *Campbell, Douglas H., Professor of Botany, Stanford University, at Cal. (34). 1888. **G**
- Campbell, Leslie Lyle, Ph. D., Westminster College, Fulton, Mo. (48).
- *Campbell, William Wallace, Director of Lick Observatory, Mt. Hamilton, Cal. (50). 1901. **A**
- *Canby, William M., 1101 Delaware Avenue, Wilmington, Del. (17). 1878. **G**
- *Cannon, George Lyman, Instructor in Geology, Denver High School (No. 1), Denver, Colo. (39). 1901. **E**
- Card, Fred. W., Kingston, R. I. (45). **G**
- Carey, Everett P., Redwood City, Cal. (50). **B C**
- Cargill, Geo. W., Attorney at Law, Charleston, W. Va. (51). **B D F G**
- *Carhart, Prof. Henry S., Univ. of Michigan, Ann Arbor, Mich. (29). 1881. **B**
- *Carleton, M. A., U. S. Dept. Agriculture, Washington, D. C. (42). 1894. **G**
- Carnaghan, Edwin Dixon, Mechanical Engineer, Durango, Do, Mexico. (50). **D**
- Carnahan, Charles T., Mining Engineer, Equitable Building, Denver, Colo. (50). **D E**
- Carnegie, Thomas Morrison, Trustee of Carnegie Institute, Dungeness, Fernandina, Fla. (50). **F**
- Carnell, Frederic J., Assistant in Physics, Sheffield Scientific School, New Haven, Conn. (50). **B**
- Carpenter, Ford A., U. S. Weather Bureau, San Diego, Cal. (44). **B**
- Carpenter, Franklin R., Ph. D., Mining Expert, 1420 Josephine St. Denver, Colo. (50). **D E**
- *Carpenter, Louis G., Agric. College, Fort Collins, Colo. (32). 1889. **A B**
- Carroll, James, M. D., 910 23d St., N.W., Washington, D. C. (50). **F K**
- Carroll, James J., Waco, Texas. (50). **F**
- Carss, Miss Elizabeth, Teachers' College, New York, N. Y. (49). **G**
- Carter, Henry C., 475 West 143d St., New York, N. Y. (50).
- Carter, James, M. D., Carbon, Wyoming. (50). **E K**
- CARTER, JAMES C., 277 Lexington Ave., New York, N. Y. (36).
- *Carter, James Madison G., M. D., Waukegan, Ill. (39). 1895. **F**
- Carter, John E., Knox and Coulter Sts., Germantown, Pa. (33). **B H**
- Carter, Marion H., Fiske Hall, Barnard College, New York, N. Y. (49).

MEMBERS AND FELLOWS.

- Carter, William Harrison, Stone Mountain, Ga. (50). **A**
- *Carus, Paul, Ph. D., Editor Open Court Pub. Co., 324 Dearborn St., Chicago, Ill. (40). 1895. **H**
- Cary, Albert A., 95 Liberty St., New York, N. Y. (36). **D**
- Cary, Mrs. Elizabeth M. L., 184 Delaware Ave., Buffalo, N. Y. (45). **E**
- Case, Eckstein, Case School of Applied Science, Cleveland, Ohio. (47).
- Case, Ermine Cowles, Prof. of Chemistry and Geology, State Normal School, Milwaukee, Wis. (50). **B C E**
- *Casey, Thomas L., Major of Engineers, U. S. A., P. O. Drawer 71, St. Louis, Mo. (38). 1892. **D F**
- Caswell, W. H., M. D., 201 West 55th St., New York, N. Y. (50).
- Cathcart, Miss J. R., The Barnard, 71st St. and Central Park, New York, N. Y. (50).
- *Catlin, Charles A., 133 Hope St., Providence, R. I. (33). 1895. **C**
- Catt, George William, C. E., President, Atlantic, Gulf and Pacific Co., Park Row Building, New York, N. Y. (51). **D**
- *Cattell, H. W., M. D., 3709 Spruce St., Philadelphia, Pa. (50). 1901. **K**
- *CATTELL, PROF. JAMES MCKEEN, Columbia Univ., New York, N. Y. (44). 1896. **B F H I**
- Chadwick, Leroy S., 1824 Euclid Ave., Cleveland, Ohio. (51).
- Chaillé, Stanford E., M. D., LL.D., Dean of Medical Department, Tulane University, New Orleans, La. (51). **K**
- Chamberlain, Charles Joseph, Dept. of Botany, University of Chicago, Chicago, Ill. (50). **G**
- Chamberlain, Frederic M., U. S. Fish Commission, Washington, D. C. (51). **F**
- Chamberlain, Paul Mellen, Prof. of Mechanical Engineering, Lewis Institute, Chicago, Ill. (51). **D**
- Chamberlin, Rollin Thomas, Hyde Park Hotel, Chicago, Ill. (50). **C E**
- *Chamberlin, T. C., Head of Dept. of Geology, Univ. of Chicago, Chicago, Ill. (21). 1877. **B E F H**
- Chamberlin, W. E., Ph. D., 111 Water St., New York, N. Y. (50).
- Chambers, Frank R., 569 Broadway, New York, N. Y. (50).
- *Chandler, Prof. C. F., School of Mines, Columbia University, New York, N. Y. (19). 1875. **C**
- *Chandler, Prof. Charles Henry, Ripon, Wis. (28). 1883. **A**
- Chandler, Elwyn Francis, Instructor in Mathematics, University of North Dakota, University, N. Dak. (50). **A B**
- *Chandler, Seth C., 16 Craigie St., Cambridge, Mass. (29). 1882. **A**
- Chaney, Prof. Lucian W., Carleton College, Northfield, Minn. (45).
- Channing, Walter, M. D., Brookline, Mass. (50). **I K**

MEMBERS AND FELLOWS.

- *Chanute, O., 413 E. Huron St., Chicago, Ill. (17). 1877. **D I**
 Charlton, Orlando Clarke, Professor, Biology and Geology, Baylor University, Waco, Tex. (51). **E F G**
- *Chase, Frederick L., Yale University Observatory, New Haven, Conn. (43). 1896. **A**
 Chase, R. Stuart, 53 Summer St., Haverhill, Mass. (18). **F**
- *Chauvenet, Wm. M., Mining Engineer, 620 Chestnut St., St. Louis, Mo. (50). 1901. **C D**
- *Cheesman, T. M., M. D., Garrison-on-Hudson, N. Y. (50) 1901. **K**
 Cheney, Mrs. B. P., Sr., Wellesley, Mass. (51).
 Cheney, Mrs. Ednah Dow, Jamaica Plain, Mass. (47).
- *Cheney, Lellen Sterling, 318 Bruen St., Madison, Wis. (42). 1894. **G**
 Cheney, Willard Colfax, Electrical Engineer, Portland, Oregon. (50). **D**
- *Chester, Prof. Albert H., Rutgers College, New Brunswick, N. J. (29). 1882. **C F**
- *Chester, Colby M., Captain, U. S. N., Navy Dept., Washington, D. C. (28). 1897. **E**
 Chester, Wayland Morgan, Associate Professor of Biology, Colgate University, Hamilton, N. Y. (50). **F**
- *Chickering, J. W., The Portner, Washington, D. C. (22). 1877. **G I**
 Chilcott, Ellery Channing, Professor of Geology, Agricultural College, Brookings, S. D. (50). **E**
- *Child, Charles Manning, Instructor in Zoology, University of Chicago, Chicago, Ill. (50). 1901. **F**
- *Child, Clement D., Colgate Univ., Hamilton, N. Y. (44). 1899. **B**
 Childs, Arthur Edward, V. P. and Treas. the Light, Heat and Power Corporation, 23 Central St., Boston, Mass. (50). **B D I**
 Childs, James Edmund, Civil Eng., 300 W. 93d St., New York, N. Y. (51). **D**
 Chisholm, Hugh J., 813 Fifth Avenue, New York, N. Y. (50).
 Chisolm, George E., 19 Liberty St., New York, N. Y. (50).
- *Chittenden, Frank Hurlbut, U. S. Dept. Agriculture, Washington, D. C. (48). 1901. **F**
- *Chittenden, Russell H., Director of Sheffield Scientific School, Yale University, New Haven, Conn. (50). 1901. **C F**
 Chittenden, Thomas A., Instructor in Mechanical Engineering, A. and M. College, W. Raleigh, N. C. (50). **D**
- *Christie, James, Chief Mech. Engineer Am. Bridge Co., Pencyd, Pa. (33). 1894. **D**
 Chrystie, Wm. F., Hastings-on-Hudson, New York, N. Y. (36).
 Church, E. D., Jr., 63 Wall St., New York, N. Y. (50).
 Church, Royal Tyler, Turin, N. Y. (38). **D F**
 Church, Samuel H., Secretary, Carnegie Institute, 1003 Penn Ave., Pittsburg, Pa. (51). **D I**

MEMBERS AND FELLOWS.

- *Chute, Horatio N., Instructor in Physical Sciences, High School, Ann Arbor, Mich. (34). 1889. **A B C**
- *CILLEY; FRANK H., Mass. Inst. Technology, Boston, Mass. (49). 1901. **A B D**
- Clancy, Michael Albert, 1426 Corcoran St., Washington, D. C. (40). **H**
- Clapp, Frederick Gardner, 169 Boston St., South Boston, Mass. (51). **E**
- Clark, Alexander S., Westfield, N. J. (33).
- Clark, Mrs. Alfred Corning, 347 W. 89th St., New York, N. Y. (49).
- Clarke, Miss Cora H., 91 Mt. Vernon St., Boston, Mass. (47). **F G**
- Clark, Edmund, 426 Sanford Ave., Flushing, L. I., N. Y. (50).
- Clark, Edward, 417 Fourth St., N.W., Washington, D. C. (40).
- Clark, Ernest P., 229 W. 18th St., New York, N. Y. (50). 1901. **D**
- *Clarke, Prof. F. W., U. S. Geol. Survey, Washington, D. C. (18). 1874. **C**
- *Clark, Gaylord Parsons, Professor of Physiology, Syracuse University, Syracuse, N. Y. (50). 1901. **F K**
- Clark, Herbert A., Haskell Institute, Lawrence, Kansas. (50). **B C**
- Clark, Hubert Lyman, Ph. D., Professor of Biology, Olivet College, Olivet, Mich. (50). **F**
- Clark, James Frederick, M. D., Fairfield, Iowa. (50). **I K**
- *Clark, Prof. John E., 445 Orange St., New Haven, Conn. (17). 1875. **A**
- Clark, John Jesse, Dean of Faculty, International Correspondence Schools, Scranton, Pa. (50). **B D**
- *Clarke, John Mason, Ph. D., Asst. State Geologist and Palæontologist, State Hall, Albany, N. Y. (45). 1897. **E**
- *Clark, John S., 110 Boylston St., Boston, Mass. (31). 1901. **B C I**
- Clark, Joseph E., M. D., 396 Fourth St., Brooklyn, N. Y. (43). **A E**
- Clark, Oliver Durfee, 590 Halsey St., Brooklyn, N. Y. (41). **E F**
- *Clarke, Prof. Samuel Fessenden, Williams College, Williamstown, Mass. (50). 1901. **F**
- Clark, Thomas H., Box 166, Plymouth, N. H. (40).
- Clark, Wm. Brewster, M. D., 50 E. 31st St., New York, N. Y. (33). **C F**
- *Clark, Wm. Bullock, Ph. D., Johns Hopkins University, Baltimore, Md. (37). 1891. **E**
- *Claypole, Dr. Agnes M., Pasadena, Cal. (46). 1899. **F**
- *Claypole, Miss Edith J., Pasadena, Cal. (46). 1899. **F**
- Cleaver, Albert N., South Bethlehem, Pa. (50). **D**
- Cleburne, William, 1219 So. Sixth St., Omaha, Neb. (51). **G**
- Clerc, Frank L., Professor of Metallurgy and Assaying, Colorado State School of Mines, Hotel Metropole, Denver, Colo. (50). **C D**
- Clifton, Richard S., Assistant Secretary, A. A. A. S., Washington, D. C. (49). **F**

MEMBERS AND FELLOWS.

- Cline, Isaac M., M. D., U. S. Weather Bureau, New Orleans, La. (50). **K**
- *Cloud, John W., 974 Rookery, Chicago, Ill. (28). 1886. **A B D**
- Clough, Albert L., Box 114, Manchester, N. H. (45). **B**
- Coates, Charles E., Ph. D., Louisiana State Univ., Baton Rouge, La. (46). **C**
- Cobb, Arthur, Architect, 600 Equitable Building, Louisville, Ky. (50). **D**
- Cobb, Prof. Collier, University of North Carolina, Chapel Hill, N. C. (49).
- *Cochran, C. B., 514 South High St., West Chester, Pa. (43). 1896. **C**
- *Cockerell, T. D. A., Consulting Entomologist, N. M. Agric. Exper. Station, East Las Vegas, New Mexico. (50). 1901. **F**
- Cockran, Hon. W. Bourke, 31 Nassau St., New York, N. Y. (50).
- COE, HENRY W., M. D., "The Marquam," Portland, Oregon. (32). **F H**
- Coe, Thomas Upham, M. D., Bangor, Maine, (51) **K**
- Coffeen, Hon. H. A., Sheridan, Wyoming. (51).
- Coffin, C. A., 44 Broad St., New York, N. Y. (50).
- *Coffin, Selden J., Ph. D., Lafayette College, Easton, Pa. (22). 1874. **A I**
- *Cogswell, Wm. B., Syracuse, N. Y. (33). 1891. **D**
- Cohen, Mendes, Civil Engineer, 825 N. Charles St., Baltimore, Md. (50). **D**
- Cohen, Solomon Solis, M. D., 1525 Walnut St., Philadelphia, Pa. (50). **F K**
- Coit, Joseph Howland, Saint Paul's School, Concord, N. H. (50).
- Coit, J. Milner, Ph. D., Saint Paul's School, Concord, N. H. (33). **B C E**
- *COLBURN, RICHARD T., Elizabeth, N. J. (31). 1894. **F H I**
- Colby, Edward A., 128 Lincoln Ave., Newark, N. J. (49).
- *Cole, Prof. Alfred D., Ohio State Univ., Columbus, Ohio. (39). 1891. **B C**
- Cole, W. F., M. D., Waco, Texas. (51) **K**
- Coleman, Clarence, U. S. Assistant Engineer, Duluth, Minn. (51). **D H**
- Coleman, Walter, Prof. of Natural History, Sam Houston Normal Institute, Huntsville, Texas. (51) . **K**
- Colgate, Abner W., Morristown, N. J. (44).
- Colie, Edw. M., East Orange, N. J. (30). **E I**
- Collett, Samuel Williamson, Principal of High School, Urbana, Ohio. (50). **G**
- Collier, Price, Tuxedo Park, N. Y. (50).
- *Collin, Prof. Alonzo, Cornell College, Mount Vernon, Iowa. (21). 1891. **B C**
- Collin, Rev. Henry P., 58 Division St., Coldwater, Mich. (37). **H**

MEMBERS AND FELLOWS.

- *Collingwood, Francis, Elizabeth, N. J. (36). 1888. **D**
- Collins, T. Shields, M. D., Globe, Arizona. (51). **K**
- *Colvin, Verplanck, Supt. N. Y. State Adirondack Survey, Albany, N. Y. (28). 1880. **E**
- *Comstock, Prof. Charles Worthington, State School of Mines, Golden, Colo. (47). 1901. **A D**
- *Comstock, Prof. Geo. C., Washburn Observatory, University of Wisconsin, Madison, Wis. (34). 1887. **A**
- *COMSTOCK, PROF. THEO. B., Mining and Metallurgical Engineer, 534 Stinson Bldg., Los Angeles, Cal. (24). 1877. **B D E**
- Comstock, Dr. T. Griswold, 3401 Washington Ave., St. Louis, Mo. (29). **F H**
- Conant, Miss E. Ida, 42 W. 48th St., New York, N. Y. (33). **F H I**
- *Conant, Prof. Levi L., Polytechnic Institute, Worcester, Mass. (39). 1892. **A**
- Conarroe, Thomas H., M. D., Lecturer on Biology, Hahnemann Medical College of Philadelphia, Philadelphia, Pa. (50). **F K**
- *Conklin, Edwin Grant, Professor of Biology, University of Pennsylvania, Philadelphia, Pa. (50). 1901. **F**
- Connelley, C. B., Supervisor Industrial Schools, Allegheny, Pa. (49). **I**
- Connor, Leartus, M. D., President of Michigan State Medical Society, 103 Cass St., Detroit, Mich. (51). **K**
- Converse, Vernon G., 15th St. and Liberty Ave., Pittsburg, Pa. (50). **D**
- Conway, George M., Mechanical Engineer, 10 Belvedere, Milwaukee, Wis. (51). **D**
- Cook, Dr. Charles D., 162 Remsen St., Brooklyn, N. Y. (25).
- Cooke, George Willis, Park St., Wakefield Park, Wakefield, Mass. (47). **H I**
- Cook, James B., Randolph Building, Memphis, Tenn. (50).
- Cook, Melville T., Greencastle, Ind. (45). **G**
- *Cook, Orator F., U. S. Dept. of Agriculture, Washington, D. C. (40). 1892. **G**
- Cook, Samuel R., Professor of Physics and Chemistry, Washburn College, Topeka, Kansas. (50). **B C**
- *Cooley, Grace E., Ph. D., Wellesley College, Wellesley, Mass. (47). 1900. **G I**
- *Cooley, Prof. LeRoy C., Vassar College, Poughkeepsie, N. Y. (19). 1880. **B C**
- *Cooley, Prof. Mortimer E., University of Michigan, Ann Arbor, Mich. (33). 1885. **D**
- Cooley, Robert A., Zoologist and Entomologist, Montana Agr'l College and Experiment Station, Bozeman, Montana. (50). **F**
- Cooper, Hon. Edward, 12 Washington Square, N., New York, N. Y. (49).

MEMBERS AND FELLOWS.

- Cooper, James Campbell, Room 5, Veale Block, Topeka, Kansas. (50). **C E**
- *Copeland, Edwin Bingham, 653 E. 57th St., Chicago, Ill. (45). 1901. **G**
- Coquille, Daniel William, U. S. National Museum, Washington, D. C. (43). **F**
- *Corbett, L. C., U. S. Dept. Agriculture, Washington, D. C. (48). 1901. **G**
- Cornman, Oliver P., Ph. D., 2252 N. 20th St., Philadelphia, Pa. (46). **H**
- *Corthell, Elmer L., 1 Nassau St., New York, N. Y. (34). 1886. **D E I**
- Corwin, Clifford Egbert, Teacher of Science, Marietta High School Marietta, Ohio. (50). **C**
- Coster, William H., Chemist and Biologist to Bureau of Water, Department of Public Works, Pittsburg, Pa. (51). **C**
- *Coulter, Prof. John M., University of Chicago, Chicago, Ill., (32). 1884. **G**
- Courtis, William Munroe, 412 Hammond Bldg., Detroit, Mich. (46). **E C G**
- Coutant, Richard Bonnet, M. D., Tarrytown, N. Y. (51). **K**
- *Coville, Frederick V., U. S. Dept. Agriculture, Washington, D. C. (35). 1890. **G**
- Cowell, John F., Botanic Garden, West Seneca, N. Y. (35.) **G**
- *Cowles, Alfred H., 656 Prospect St., Cleveland, Ohio. (37). 1897. **B C**
- Cowles, Miss Louise F., Mt. Holyoke College, South Hadley, Mass. (47). **E**
- Cox, Abraham Beekman, Civil Engineer, Cherry Valley, N. Y. (50). **D**
- *Cox, Charles F., Grand Central Depot, New York, N. Y. (43). 1900. **F G**
- Cox, Edmund Otis, C. E., Manhattan Railway Co., 11 Manhattan Ave., New York, N. Y. (51). **D**
- Cox, Ulysses O., Professor of Biology, State Normal School, Man-
kota, Minn. (50). **F**
- Coxe, Eckley B., Jr., U. S. Weather Bureau Observer, Drifton, Pa. (51).
- Coyle, Rev. John S., S. J., St. Joseph's College, 17th and Stiles Sts., Philadelphia, Pa. (48). **B**
- Crafts, Clayton Edward, 5433 Washington Boulevard, Chicago, Ill. (50). **I**
- *Crafts, James Mason, Mass. Inst. Technology, Boston, Mass. (47). 1898. **C**
- *Cragin, Francis Whittemore, Ph. D., 1715 Wood Ave., Colorado Springs, Colo. (29). 1890. **E F H**

MEMBERS AND FELLOWS.

- Craig, John, College of Agriculture, Cornell University, Ithaca, N. Y. (41). **G**
- Craig, Wallace, Zoological Laboratory, Univ. of Chicago, Chicago, Ill. (50). **F**
- CRAM, ROYS JONES, 26 Hancock Ave., West, Detroit, Mich. (51).
- *Crampton, Chas. A., M. D., Office of Internal Revenue Commissioner, U. S. Treasury Dept., Washington, D. C. (36). 1887. **C**
- Crampton, Henry E., Adjunct Professor of Zoology, Barnard College, Columbia University, New York, N. Y. (51). **F**
- *Crandall, Charles S., Glendale, Cal. (40). 1894.
- Crandall, Francis Asbury, 2219 15th St., N.W., Washington, D. C. (50). **I**
- Cran^e, James M., Board of Education, Newburgh, N. Y. (50). **I**
- Crane, Walter, Supt. Carnegie Free Library, Braddock, Pa. (47). **G**
- Cranford, J. P., Wakefield, New York, N. Y. (50).
- Cranston, Robert E., E. M., M'g'r Ashburton Mining Co., Folsom, Cal. (50). **D E**
- Crawford, David Francis, Supt. Motive Power, Penna. Co., Ft. Wayne, Ind. (50). **D**
- Crawford, John, Leon, Nicaragua, Central America. (40). **E H**
- *Crawford, Morris B., Middletown, Conn. (30). 1889. **B**
- *Crawley, Edwin S., Ph. D., Springfield Ave., Chestnut Hill, Philadelphia, Pa. (45). 1900. **A**
- Crawley, Howard, Wyncote, Pa. (51). **F**
- Crehore, Albert Cushing, Brookside Park, Tarrytown, N. Y. (50). **D E**
- Crile, George W., M. D., 169 Kensington St., Cleveland, Ohio. (51). **K**
- Crockard, Frank Hearne, E. M., C. E., Asst. Mgr. Riverside Dept. National Tube Co., Lock Box 34, Wheeling, W. Va. (50). **D**
- *Crocker, Francis B., Professor of Electrical Engineering, Columbia University, New York, N. Y. (50). 1901. **B D**
- *Crockett, Prof. Charles W., Rensselaer Polytechnic Institute, Troy, N. Y. (39). 1894. **A D**
- Crook, Alja Robinson, Ph. D., 1914 Sheridan Road, Evanston, Ill. (47). **E**
- *Crosby, Prof. W. O., Mass. Institute Technology, Boston, Mass. (47). 1900. **E**
- *Cross, Prof. Charles R., Mass. Inst. Technology, Boston, Mass. (20). 1880. **B**
- Crouse, Hugh Woodward, M. D., Victoria, Texas. (50). **F K**
- CROWELL, A. F., Woods Holl, Mass. (30). **C**
- *Crowell, John Franklin, Bur. of Statistics, Treasury Dept., Washington, D. C. (50). 1901. **I**
- Crozier, William, Brigadier-General and Chief of Ordnance, U. S. A., War Department, Washington, D. C. (50). **D**

MEMBERS AND FELLOWS.

- Cruikshank, James, LL.D., 206 S. Oxford St., Brooklyn, N. Y. (36).
 Crump, Col. M. H., Bowling Green, Ky. (29). **E**
 Cryer, Matthew H., M. D., D. D. S., 1420 Chestnut St., Philadelphia, Pa. (50). **F K**
 *Culin, Stewart, Univ. of Pennsylvania, Philadelphia, Pa. (33).
 1890. **H**
 Culver, Charles Mortimer, M. D., 36 Eagle St., Albany, N. Y.
 (51). **K**
 *Cumings, Edgar R., Bloomington, Ind. (48). 1901. **E**
 *Cummings, Miss Clara E., Wellesley College, Wellesley, Mass.
 (47). 1899. **G**
 Cummins, George Wyckoff, M. D., Belvidere, N. J. (50). **G K**
 Cunningham, Francis A., 1613 Wallace St., Philadelphia, Pa. (33).
B D E
 *Cunningham, Prof. Susan J., Swarthmore College, Swarthmore,
 Pa. (38). 1901. **A**
 Cuntz, Johannes H., 325 Hudson St., Hoboken, N. J. (36).
 Currie, C. A., M. D., P. O. Box 1606, Philadelphia, Pa. (48). **F**
 Curtis, Charles B., 9 East 54th St., New York, N. Y. (50).
 Curtis, Geo. W., McKinney, Texas. (50).
 Curtis, H. Holbrook, M. D., 118 Madison Ave., New York, N. Y.
 (51). **K**
 Curtis, Mattoon M., Prof. of Philosophy, Western Reserve Uni-
 versity, Cleveland, Ohio. (50). **H I**
 Curtis, William E., Post Building, Washington, D. C. (40). **HI**
 *Cushing, Henry Platt, Adelbert College, Cleveland, Ohio. (33).
 1888. **E**
 Cushing, John J., 1001 Union Trust Bldg., Cincinnati, Ohio. (50). **D**
 *Cushman, Allerton, Ph. D., Instructor in Chemistry, Bryn Mawr
 College, Bryn Mawr, Pa. (50). 1901. **C**
 *Cushny, Arthur R., Professor of Materia Medica and Thera-
 peutics, Univ. of Michigan, Ann Arbor, Mich. (50). 1901. **K**
 Cutler, Coiman Ward, M. D., 36 East 33d St., New York, N. Y.
 (50). **K**
 Cutter, Ephraim, M. D., 120 Broadway, New York, N. Y. (51). **K**
 Cutter, Irving S., Box 732, Lincoln, Neb. (50). **F G**
 Cutter, W. D., College of Physicians and Surgeons, Columbia
 Univ., New York, N. Y. (50). **K**
 *Dabney, Charles W., Ph. D., President University of Tennessee,
 Knoxville, Tenn. (47). 1901. **C**
 Daggette, Alvin S., M. D., 400 South Craig St., Pittsburg, Pa. (50).
F K
 Dale, J. Y., M. D., P. O. Box 14, Lemont, Pa. (51). **K**
 *Dall, William H., Smithsonian Institution, Washington, D. C.
 (18). 1874. **F H**
 Dalrymple, W. H., Prof. Vet. Science, La. State Univ. and A. &
 M. College, Baton Rouge, La. (50). **F K**

MEMBERS AND FELLOWS.

- *Dana, Dr. Charles L., 50 W. 46th St., New York, N. Y. (46). 1889.
H
- *Dana, Edward Salisbury, New Haven, Conn. (23). 1875. **B E**
Danforth, Isaac Newton, M. D., 70 State St., Chicago, Ill. (50). **K**
Daniel, John, Professor of Physics, Vanderbilt Univ., Nashville, Tenn. (50). **B**
Danielson, A. H., Agricultural College, Fort Collins, Colo. (50). **G**
- *Darton, Nelson H., U. S. Geol. Survey, Washington, D. C. (37).
1893.
d'Auria, Luigi, M. E., 3810 Locust St., Philadelphia, Pa. (51). **A D**
- *Davenport, Charles Benedict, Ph. D., Univ. of Chicago, Chicago, Ill. (46). 1898. **F**
Davenport, Eugene, Dean of the College of Agriculture, University of Illinois, Champaign, Ill. (39).
Davenport, Francis Henry, M. D., 419 Boylston St., Boston, Mass. (50). **K**
- *Davidson, George, 2221 Washington St., San Francisco, Cal. (29).
1881. **A B D**
Davidson, R. J., Agric. Exper. Station, Blacksburg, Va. (40). **C**
Davies, William G., 22 E. 45th St., New York, N. Y. (49).
Davis, Abial B., 129 East Lincoln Ave., Mt. Vernon, N. Y. (44). **A**
DAVIS, ANDREW MCFARLAND, 10 Appleton St., Cambridge, Mass. (35). **H**
Davis, Bergen, Columbia University, New York, N. Y. (49). **B**
- *Davis, Bradley Moore, Dept. of Botany, Univ. of Chicago, Chicago, Ill. (45). 1897. **G**
Davis, Charles F., Fort Collins, Colo. (50). **C**
- *Davis, C. H., Commander U. S. N., Navy Dept., Washington, D. C. (40). 1896.
Davis, Edward E., 47 W. Main St., Norwich, N. Y. (50).
Davis, George S., P. O. Box 724, Detroit, Mich. (50).
- *Davis, Herman S., Ph. D., Director of International Latitude Station, Gaithersburg, Md. (50). 1901. **A**
- *Davis, J. J., M. D., 1119 College Ave., Racine, Wis. (31). 1899.
F G
Davis, John J., Attorney at law, Clarksburg, W. Va. (50). **I**
Davis, J. Woodbridge, 523 West 173d St., New York, N. Y. (47). **A**
Davis, Kary Cadmus, Ph. D., Professor of Horticulture and Forestry, State University, Morgantown, W. Va. (50). **G**
Davis, Nathan Smith, M. D., LL. D., 65 Randolph St., Chicago, Ill. (51). **K**
Davis, N. S., Jr., 291 Huron St., Chicago, Ill. (50). **F G**
Davis, Wm. Harper, Asst. in Psychology, Columbia Univ., New York, N. Y. (50). **H I**
- *Davis, Prof. Wm. Morris, Cambridge, Mass. (33). 1885. **B E I**
Davis, Wm. Walley, Virginia Iron, Coal and Coke Co., Roanoke, Va. (50). **C**

MEMBERS AND FELLOWS.

Davison, Alvin, Ph. D., Lafayette College, Easton, Pa. (49).
 Davison, John M., 340 Oxford St., Rochester, N. Y. (38). **C**
 Daviss, Edward Paxton, M. D., 205-6 Binz Building, Houston, Texas, (51). **K**

Davy, Joseph Burt, Asst. Botanist, Agric. Exper. Station, Berkeley, Cal. (51) **G**

Dawson, Percy Millard, M. D., Instructor in Physiology, Johns Hopkins Medical School, Baltimore, Md. (50). **K**

*Day, Fisk H., M. D., 309 Sycamore St., Lansing, Mich. (20). 1874.

E F H

*DAY, WILLIAM SCOFIELD, Ph. D., Tutor in Physics, Columbia University, New York, N. Y. (50). 1901. **B**

Dean, Seth, C. E., Surveyor of Mills County, Glenwood, Iowa. (34). **D**

Dean, Wm. H., 167 West River St., Wilkes-Barre, Pa. (50). **C**

Deans, John Sterling, Chief Engineer, Phoenix Bridge Co. Phoenixville, Pa. (51). **D**

de Arozarena, Rafael M., Consulting Engineer, 2da Calle de las Estaciones, Esquina de Encino, City of Mexico, Mexico. (51).

D

de Benneville, James S., University Club, 1510 Walnut St., Philadelphia, Pa. (46). **C**

de Coppet, Henry, 22 West 17th St., New York, N. Y. (49).

Deens, Miss Anna M., 216 North Ave., W., Allegheny, Pa. (50).

F G

de Forest, Robert W., 30 Broad St., New York, N. Y. (49).

de Funiak, Frederick, Consulting Engineer, 204 E. Chestnut St., Louisville, Ky. (51). **D**

De Garmo, William Burton, M. D., Professor of Surgery, N. Y. Post Graduate Medical School and Hospital, 56 W. 36th St., New York, N. Y. (51). **K**

*Deghu e, Joseph A., Ph. D., 247 Harrison St., Brooklyn, N. Y. (40). 1900. **C**

*Delabarre, E. B., Ph. D., Professor of Psychology, Brown University, Providence, R. I. (49). 1901. **H I**

Delafield, Maturin L., Jr., Fieldston, Riverdale, New York, N. Y. (43). **G**

Delafond, E., Ingenieur Chimiste, P. O. Box 252, San Juan, Porto Rico. (50). **C**

DE LANDERO, CARLOS F., Asst. Director Pachuca and Real del Monte Mining Co., Pachuca, Mexico. (36). **B C**

Delano, Frederic A., Supt. of Motive Power, C. B. and Q Railroad, 209 Adams St., Chicago, Ill. (50). **D**

Delany, Patrick Bernard, E. E., Inventor, South Orange, N. J. (50). **D**

Dempster, Alexander, Stanton and Euclid Aves., Pittsburg, Pa. (50). **D**

MEMBERS AND FELLOWS.

- *Dennis, David Worth, Professor of Biology, Earlham College, Richmond, Ind. (50). 1901. **F**
- *Dennis, Louis Monroe, Cornell University, Ithaca, N. Y. (43). 1895. **C**
- *Denton, Prof. James E., Stevens Institute, Hoboken, N. J. (36). 1888. **A B D**
- de Raasloff, Harold, Civil Engineer, 18 Burling Slip, New York, N. Y. (51). **D**
- Derby, George McClellan, Major, Corps of Engineers, U. S. A., 3232 Prytania St., New Orleans, La. (50). **D**
- *Derby, Orville A., Commissao Geologica, Sao Paulo, Brazil, South America. (39). 1890. **E**
- *de Schweinitz, E. A., M. D., U. S. Dept. Agriculture, Washington, D. C. (36). 1889. **C**
- Detmers, Fredericka, 1315 Neil Ave., Columbus, Ohio. (48). **G**
- Devereux, W. B., 99 John St., New York, N. Y. (50).
- *Dewey, Lyster H., U. S. Dept. Agriculture, Washington, D. C. (40). 1899. **F G**
- *Dexter, Franklin, M. D., Associate Professor of Anatomy, Harvard Medical School, Boston, Mass. (50). 1901. **K**
- Dickerson, E. N., 141 Broadway, New York, N. Y. (49).
- Dickinson, Gordon K., M. D., 278 Montgomery St., Jersey City, N. J. (51). **K**
- Diemer, Hugo, Associate Professor of Mechanical Engineering, Univ. of Kansas, Lawrence, Kans. (49).
- *Dimmock, George, Box 1597, Springfield, Mass. (22). 1874. **F**
- Dimock, Mrs. Henry F., 25 East 60th St., New York, N. Y. (50).
- Dimon, Miss Abigail Camp, 367 Genesee St., Utica, N. Y. (50). **F K**
- Dinke, Alva C., General Supt. Homestead Steel Works, Munhall, Pa. (50). **D**
- Dinsmore, Prof. Thos. H., Jr., 1012 E. Adams St., Syracuse, N. Y. (29). **B C**
- Disbrow, William S., M. D., 151 Orchard St., Newark, N. J. (51). **K**
- *Dixon, Roland B., Peabody Museum, Cambridge, Mass. (46). 1901. **H**
- Dixon, Samuel Gibson, M. D., Acad. Nat. Sciences, 1900 Race St., Philadelphia, Pa. (50). **F K**
- Dock, George, M. D., 1014 Cornwell Place, Ann Arbor, Mich. (51). **K**
- *Dodge, Charles Richards, U. S. Dept. of Agriculture, Washington, D. C. (22). 1874.
- *Dodge, Charles Wright, Univ. of Rochester, Rochester, N. Y. (39). 1898. **F**
- Dodge, D. Stuart, 225 Madison Ave., New York, N. Y. (49).
- Dodge, Philip T., Tribune Building, New York, N. Y. (44). **B D**
- *Dodge, Richard E., Teachers' College, Columbia Univ., New York, N. Y. (49). 1901. **E I**

MEMBERS AND FELLOWS.

- Dodman, Alfred C., Jr., 235 W. 108th St., New York, N. Y. (50).
- Doherty, Henry L., 40 Wall St., New York, N. Y. (48). **B C D**
- Doherty, Manning William, Associate Professor of Biology, Ontario Agricultural College, Guelph, Canada. (50). **F G**
- *Dolbear, Prof. A. Emerson, Tufts College, Mass. (20). 1880. **B**
- Dole, Rev. Charles Fletcher, Jamaica Plain, Mass. (50). **I**
- Domenech, Manuel V., Civil Engineer and Architect, Lock Box 220, Ponce, Porto Rico. (50). **D I**
- Donovan, Cornelius, Port Eads, La. (51).
- *Doolittle, Prof. C. L., Upper Darby, Pa. (25). 1885. **A**
- *Dorsey, George A., Ph. D., Field Columbian Museum, Chicago, Ill. (39). 1892. **H**
- *Dorsey, N. Ernest, Ph. D., Annapolis Junction, Md. (46). 1898. **B**
- Doty, Paul, 230 Woodward Ave., Detroit, Mich. (43). **D**
- Doubt, Thomas E., Professor of Physics and Electrical Engineering, Univ. of Washington, Seattle, Wash. (48). **B**
- Doughty, Mrs. Alla, Milford, Pa. (49).
- Doughty, John W., 165 Johnston St., Newburgh, N. Y. (19). **E**
- Douglas, Mrs. George William, Tuxedo Park, N. Y. (49).
- Douglas, James, 99 John St., New York, N. Y. (49).
- Douglas, Orlando B., 20 Pleasant St., Concord, N. H. (49).
- *Douglass, Andrew E., Amer. Mus. of Nat. History, Central Park, New York, N. Y. (31). 1885. **H**
- Dow, Herbert H., Midland, Mich. (47). **C**
- Dowell, Philip, Ph. D., Professor of Natural Science, Muhlenberg College, Allentown, Pa. (50). **F**
- Downing, Elliott Rowland, Ph. D., Professor of Biology, Northern State Normal School, Marquette, Mich. (51). **F**
- Downs, Edgar Selah, 1420 Pine St., Philadelphia, Pa. (50). **B**
- *DRAPER, DANIEL, Ph. D., N. Y. Meteorological Observatory, Central Park, 64th St., Fifth Ave., New York, N. Y. (29). 1881. **A B D F**
- Draper, Mrs. Henry, 271 Madison Ave., New York, N. Y. (49).
- Drayer, H. C., Superintendent of Schools, Manteno, Ill. (51).
- Drescher, Willibald A. E., P. O. Drawer 1033, Rochester, N. Y. (41). **F**
- *DROPPERS, GARRETT, President of the State University, Vermillion, S. Dak. (50). 1901. **I**
- *Drown, Prof. Thos. M., Lehigh University, South Bethlehem, Pa. (29). 1881. **C**
- Drummond, Isaac Wyman, Ph. D., 436 W. 22d St., New York, N. Y. (36).
- Dryer, Charles Redway, Professor of Geography, Indiana State Normal School, Terre Haute, Ind. (50). **E**
- Duane, Russell, 911 Pine St., Philadelphia, Pa. (50). **I**
- *Duane, William, Ph. D., Professor of Physics, State University, Boulder, Colo. (50). 1901. **B**

MEMBERS AND FELLOWS.

- *DU BOIS, PROF. AUG. J., New Haven, Conn. (30). 1882. **A B D**
 De Bois, Howard Weidner, 4526 Regent St., Philadelphia, Pa. (47). **A**
- *Du Bois, Patterson, 401 So. 40th St., Philadelphia, Pa. (33). 1887. **C H I**
 DuBois, Wm. E. B., Professor of Economics and History, Atlanta University, Atlanta, Ga. (50). **I**
 Du Bose, F. G., M. D., 915 Alabama St., Selma, Ala. (51). **K**
 Dudgeon, H. R., M. D., Demonstrator of Surgery, School of Medicine, University of Texas, Galveston, Texas. (50). **F K**
- *Dudley, Charles B., Drawer 334, Altoona, Pa. (23). 1882. **B C D**
 Dudley, S. W., 15 Austin St., Westville, Conn. (50). **A D**
- *DUDLEY, WM. L., Vanderbilt University, Nashville, Tenn. (28). 1881. **C**
 *Dudley, Prof. Wm. R., Dept. of Systematic Botany, Stanford University, Cal. (29). 1883. **G**
- *Duggar, Benjamin Minge, U. S. Dept. Agriculture, Washington, D. C. (45). 1900. **G**
 Duke, Frank Williamson, Professor of Mathematics, Hollins Institute, Hollins, Va. (50). **A**
 Dulles, Charles W., M. D., 4101 Walnut St., Philadelphia, Pa. (51). **K**
 Dumaresq, Philip K., Sears Bldg., Boston, Mass. (50).
- *Dumble, E. T., Consulting Geologist, Southern Pacific Co., 1708 Prairie Ave., Houston, Tex. (37). 1891. **E**
 Duncan, Fred. N., Chemist, Georgetown, Texas. (50). **C**
 Duncan, George Martin, Professor of Philosophy, Yale University, New Haven, Conn. (50). **H**
 Duncanson, Henry Bruce, Professor of Biology, State Normal School, Peru, Neb. (50). **F**
 Dunklee, John B., Civil Engineer, 35 Fairview Ave., South Orange, N. J. (51). **D**
- *Dunham, Edward K., 338 E. 26th St., New York, N. Y. (30). 1890.
 Dunham, Henry Bristol, M. D., State Sanatorium, Rutland, Mass. (51). **K**
 Dunlevy, Robert Baldwin, Prof. Kansas State Normal College, Winfield, Kansas. (50). **C E**
- Dunn, Gano Sillick, Electrical Engineer, Crocker-Wheeler Company, Ampere, N. J. (50). **D**
 Dunn, Miss Louise Brisbin, Barnard College, Columbia University, New York, N. Y. (47). **G**
 Dunning, Lehman H., M. D., 224 N. Meridian St., Indianapolis, Ind. (51). **K**
- *Dunnington, Prof. F. P., University Station, Charlottesville, Va. (26). 1880. **C**
- *Dunstan, A. St. C., Professor of Electrical Engineering, Polytechnic Institute, Auburn, Ala. (50). 1901. **B D**

MEMBERS AND FELLOWS.

- *DuPont, Francis G., Wilmington, Del. (33). 1896. **A B D**
- *Durand, Elias J., D. S., 402 Eddy St., Ithaca, N. Y. (41). 1899.
G
- Durand, John S., 146 Broadway, New York, N. Y. (49).
- *Durand, W. F., Ph. D., Cornell University, Ithaca, N. Y. (37). 1890.
B
- *Durfee, William P., Ph. D., 639 Main St., Geneva, N. Y. (46).
1899. **A**
- Dutton, Charles Frederic, Jr., 626 Franklin Ave., Cleveland, Ohio.
(47).
- Duval, Edmund P. R., 2006 University Ave., Austin, Texas. (50).
- Duvel, Joseph W. T., Botanical Lab., Univ. of Michigan, Ann
Arbor, Mich. (48). **G**
- Dwight, Dr. Jonathan, Jr., 2 E. 34th St., New York, N. Y. (49).
- *Dwight, Thomas, M. D., Harvard Medical School, Boston, Mass.
(47). 1898. **H K**
- *Dwight, Prof. William B., Vassar College, Poughkeepsie, N. Y.
(30). 1882. **E F**
- *Dyar, Harrison G., Ph. D., U. S. National Museum, Washington,
D. C. (43). 1898.
- Dyche, Lewis Lindsay, Professor of Systematic Zoology and
Taxidermist, University of Kansas, Lawrence, Kans. (51). **F**
- Dysterud, E., Electrical Engineer, Monterey, Mexico. (50). **D**
- Eagleson, James B., M. D., 512 Burke Bldg., Seattle, Wash. (51).
K
- *Earle, F. S., N. Y. Botanical Garden, Bronx Park, New York.
(39). 1896. **G**
- *Eastman, Charles Rochester, Museum Comp. Zoology, Cambridge,
Mass. (41). 1896. **E F**
- *Eastman, Prof. J. R., Andover, N. H. (26). 1879. **A**
- *Eastwood, Miss Alice, Curator of Herbarium, California Academy
of Sciences, San Francisco, Cal. (50). 1901. **G**
- Eccles, David Charles, Chemist, Agricultural College, Pullman,
Wash. (50). **C**
- *Eccles, Robert G., M. D., 191 Dean St., Brooklyn, N. Y. (31).
1894. **C F**
- Eckel, Edwin C., C. E., Assistant in Geology, N. Y. State Museum,
Albany, N. Y. (51). **E**
- Eckles, C. H., Columbia, Mo. (50). **F**
- *Eddy, Prof. H. T., Univ. of Minnesota, Minneapolis, Minn. (24).
1875. **A B D**
- Edes, Robert Thaxter, M. D., 15 Greenough Ave., Jamaica Plain,
Mass. (50). **F H K**
- Edgar, Clinton G., 72 Jefferson Ave., Detroit, Mich. (46).
- Edmands, Isaac Russell, Supt. Union Carbide Co., Sault Ste.
Marie, Mich. (50). **C D**

MEMBERS AND FELLOWS.

- Edmonds, Richard H., President and Editor, "Manufacturers' Record," Baltimore, Md. (50). **D**
- *Edwards, Prof. Charles Lincoln, Trinity College, Hartford, Conn. (49). 1900. **F**
- Edwards, Prof. John W., Iowa Wesleyan University, Mt. Pleasant Iowa. (48).
- Ehrenfeld, Frederick, Ph. D., Instructor in Geology, University of Pennsylvania, Philadelphia, Pa. (50). **E**
- Ehrhorn, Edward Macfarlane, County Entomologist, Santa Clara Co., Mountain View, Cal. (50). **F**
- *Eichelberger, William Snyder, Ph. D., Nautical Almanac Office, U. S. Naval Observatory, Washington, D. C. (41). 1896. **A**
- Eisland, John, Ph. D., Professor of Mathematics, Thiel College, Greenville, Pa. (50). **A**
- *Eigenmann, Carl H., Ph. D., Indiana University, Bloomington, Ind. (48). 1899. **F**
- Eilers, Anton F., Mining Engineer and Metallurgist, 751 St. Marks Ave., Brooklyn, N. Y. (50). **D E**
- *Eimbeck, William, U. S. C. and G. Survey, Washington, D. C. (17). 1874. **A B D**
- Eimer, August, 220 East 19th St., New York, N. Y. (50).
- Elder, E. Waite, Instructor in Physics, High School, Denver, Colo. (50). **B**
- Elftman, Arthur Hugo, Ph. D., Mining Engineer, 706 Globe Building, Minneapolis, Minn. (50). **E**
- *Elkin, William L., Yale University Observatory, New Haven, Conn. (33). 1885. **A**
- Elliot, George T., M. D., 36 East 35th St., New York, N. Y. (50). **F K**
- Ellis, Frederick W., M. D., Monson, Mass. (47). **B H**
- Ellis, H. Bert, M. D., 243-246 Bradbury Block, Los Angeles, Cal. (50). **K**
- Ellis, Robert W., Hurley, S. D. (50). **E**
- *Elrod, Morton John, Professor of Biology, University of Montana, Missoula, Mont. (50). 1901. **F**
- Ely, Sumner B., Chief Engineer American Sheet Steel Co., Vandergrift Building, Pittsburg, Pa. (50). **D**
- *Ely, Theo. N., Chief of Motive Power, Pennsylvania R.R., Broad St. Station, Philadelphia, Pa. (29). 1886. **D**
- *Emerson, Prof. Benjamin K., Box 203, Amherst, Mass. (19). 1877. **E F**
- *EMERSON, C. F., Box 499, Hanover, N. H. (22). 1874. **A B**
- *Emery, Albert H., Stamford, Conn. (29). 1884. **B D**
- Emery, Albert Hamilton, Jr., 312 Main St., Stamford, Conn. (47). **D**
- Emmerton, Frederic Augustus, 9 Bratenahl Bldg., Cleveland, Ohio. (50). **I**

MEMBERS AND FELLOWS.

- Emmons, Arthur B., Newport, R. I. (50). **E**
- *EMMONS, S. F., U. S. Geol. Survey, Washington, D. C. (26). 1879. **E**
- Enders, Howard Edwin, Professor of Biology, Lebanon Valley College, Annville, Pa. (50). **F G**
- *Engelman, George J., M. D., 336 Beacon St., Boston, Mass. (25). 1875. **F H**
- Engle, Wilber Dewight, Professor of Chemistry, University of Denver, University Park, Colo. (50). **C**
- *Engler, Edmund Arthur, President Worcester Polytechnic Institute, Worcester, Mass. (50). 1901. **A**
- English, William Thompson, M. D., Professor of Physical Diagnosis, Western University of Pennsylvania, Pittsburg, Pa. (50). **K**
- ENO, A. F., 32 Fifth Avenue, New York, N. Y. (50).
- Eno, John Chester, Waldorf-Astoria Hotel, New York, N. Y. (49).
- Epper, Rev. Frowin, O. S. B., Mt. Angel, Oregon. (50). **F**
- Esmond, Darwin W., Newburgh, N. Y. (50). **A I**
- ESTES, DANA, Brookline, Mass. (29). **H I**
- Evans, Alexander W., M. D., 12 High St., New Haven, Conn. (45). **G**
- Evans, Henry Brown, 3009 Cambridge Place, Washington, D. C. (48). **A**
- Evans, Samuel G., 211 Main St., Evansville, Ind. (30). **F**
- Evans-Carrington, Rev. Edward, 227 E. Cucharras St., Colorado Springs, Colo. (51). **I**
- Evers, Edward, M. D., 1861 N. Market St., St. Louis, Mo. (28). **F H**
- Everts, Orpheus, M. D., Medical Superintendent, The Cincinnati Sanitarium, Sta. K, Cincinnati, Ohio. (51). **K**
- *Ewell, Ervin E., 1804 S St., Washington, D. C. (40). 1896. **C**
- *Eyerman, John, "Oakhurst," Easton, Pa. (33). 1889. **C E**
- Faile, Thomas H., Murray Hill Hotel, New York, N. Y. (50).
- *Fairbanks, Henry, Ph. D., St. Johnsbury, Vt. (14). 1874. **A B D**
- Fairchild, B. T., P. O. Box 1120, New York, N. Y. (36).
- *Fairchild, David Grandison, U. S. Dept. Agriculture, Washington, D. C. (47). 1898. **G**
- *Fairchild, Prof. H. L., Univ. of Rochester, Rochester, N. Y. (28). 1883. **E F**
- Falconer, William, Schenley Park, Pittsburg, Pa. (29).
- Falding, Frederic J., Consulting Chemical Engineer, 52 Broadway, New York, N. Y. (50). **C**
- Falk, Gustav, 24 East 81st St., New York, N. Y. (50).
- *Fanning, John T., Consulting Engineer, Kasota Block, Minneapolis, Minn. (29). 1885. **D**
- *Fargis, Rev. Geo. A., S. J., Boston College, 761 Harrison Ave., Boston, Mass. (40). 1892.
- Farley, Godfrey Pearson, C. E., General Manager, W. W. & F. R. R. Co., Wiscasset, Maine. (51). **D**

MEMBERS AND FELLOWS.

- *Farlow, Dr. W. G., 24 Quincy St., Cambridge, Mass. (20). 1875. **G**
 Farnsworth, Philo J., M. D., Clinton, Iowa. (50). **K**
 Farquhar, Miss Helen, State Normal School, West Chester, Pa. (50). **A B**
 *Farquhar, Henry, Census Office, Washington, D. C. (33). 1886.
A B G I
 Farr, Marcus S., Sc. D., Princeton Univ., Princeton, N. J. (49). **E**
 Farrand, Livingston, M. D., Columbia University, New York, N. Y. (50). **H**
 Farwell, Elmer S., Steam Engineer, 507 W. 142d St., New York, N. Y. (51). **A D**
 Farwell, Robert Benneson, C. E., 53 Monument Ave., Charlestown, Mass. (47). **D**
 *Fassig, Oliver Lanard, Johns Hopkins University, Baltimore, Md. (46). 1899. **B**
 Fast, Richard Ellsworth, Professor American History and Political Sciences, West Virginia University, Morgantown, W. Va. (50).
I
 Faught, John B., Professor of Mathematics, Northern State Normal School, Marquette, Mich. (50). **A**
 Fawcett, Ezra, Mechanical and Electrical Engineer, 233 Ely St., Alliance, Ohio. (48). **B D**
 Fay, L. G., Naval Office, 20 Exchange Place, New York, N. Y. (50).
 Fellows, Charles S., 925 Guaranty Building, Minneapolis, Minn. (34). **F**
 Felt, Charles Wilson, 185 Austin St., Worcester, Mass. (47). **I**
 *Felt, Ephraim Porter, Ph. D., State Entomologist, Albany, N. Y. (44). 1899. **F**
 Fényes, Adalbert, M. D., P. O. Box W, Pasadena, Cal. (51). **F**
 Ferguson, Alexander McGowen, Instructor in Botany, Univ. of Texas, Austin, Texas. (51). **G**
 Fenald, F. A., Broadway and 117th St., New York, N. Y. (43). **C**
 *Fernow, Bernhard E., Director N. Y. State College of Forestry, Cornell University, Ithaca, N. Y. (31). 1887. **G I**
 Ferril, William C., Curator, State Historical and Natural History Society of Colorado, Denver, Colo. (50). **E F G H I**
 Ferry, Dexter M., Jr., Seedsman, 1040 Woodward Ave., Detroit, Mich. (50). **G**
 *Fessenden, Prof. Reginald A., U. S. Weather Bureau, Washington D. C. (47). 1899. **A B**
 *Fewkes, Dr. J. Walter, Bureau of Amer. Ethnology, Washington, D. C. (48). 1900. **H**
 Field, Archelaus G., M. D., LL. B., Summit Place, Des Moines, Iowa. (48).
 Field, George Wilton, Mass. Inst. Tech., Boston, Mass. (47).

MEMBERS AND FELLOWS.

- Field, W. L. W., Milton, Mass. (47). **F**
- Finch, John Wellington, State Geologist, Victor, Colo. (50). **E**
- Findlay, Merlin C., Professor of Biology, Park College, Parkville, Mo. (50). **F**
- *Fink, Prof. Bruce, Upper Iowa Univ., Fayette, Iowa. (45). 1890. **G**
- *Firmstone, F., Cranberry, N. C. (33). 1887. **D**
- Fischel, Washington E., M. D., 2647 Washington, Ave., St. Louis, Mo. (50). **F K**
- Fisher, Louis Albert, U. S. C. and G. Survey, Washington, D.C. (47). **A B C**
- Fish, Charles Henry, M. E., General Manager, Coheco Mf'g Co., Dover, N. H. (51). **D**
- *Fish, Pierre A., D. V. S., Ithaca, N. Y. (49). 1901. **K**
- Fish, Walter Clark, General Elec. Co., Lynn, Mass. (50). **D**
- Fishburne, Edward Bell, Jr., President Hoge Memorial Military Academy, Blackstone, Va. (51). **D**
- Fisher, George E., 37 and 39 Wall St., New York, N. Y. (37).
- Fisher, George Egbert, University of Pennsylvania, Philadelphia, Pa. (51).
- Fisher, Irving, Ph. D., 460 Prospect St., New Haven, Conn. (50). 1901. **A I**
- Fisher, Robert Jones, 614 F St., N.W., Washington, D. C. (50). **D**
- Fisher, Robert Welles, M. D., 159 E. 2d South St., Salt Lake City, Utah. (51). **K**
- Fisher, S. Wilson, 1502 Pine St., Philadelphia, Pa. (51). **A**
- Fisher, William Bowditch, General Manager, American Zinc, Lead and Smelting Co., Cartersville, Mo. (50). **C D E**
- Fisk, Herbert F., Principal of the Academy, Northwestern University, Evanston, Ill. (50).
- *Fiske, Prof. Thomas S., Columbia University, New York, N. Y. 1901. (50).
- Fiske, Wilbur A., Professor of Science, Richmond High School, Richmond, Ind. (51). **B**
- *Fitz, George W., M. D., 483 Beacon St., Boston, Mass. (47). 1898. **H**
- Fitz Gerald, Francis A. J., P. O. Box 118, Niagara Falls, N. Y. (50). **C**
- Flanders, Charles S., Franklin, Mass. (42). **E**
- *Flather, John J., Professor of Mechanical Engineering, University of Minnesota, Minneapolis, Minn. (44). 1896. **D**
- Fleming, John A., 1109 13th St., N. W., Washington, D. C. (48).
- Fleming, Miss Mary A., The Oxford, 432 Pearl St., Buffalo, N. Y. (47). **E G**
- Flemming, Dudley D., Gas Engineer, 249 Washington St., Jersey City, N. J. (50). **C D**
- *Fletcher, Miss Alice C., Peabody Museum, Cambridge, Mass. (29). 1883. **H**

MEMBERS AND FELLOWS.

- FLETCHER, ANDREW, 339 West 77th St., New York, N. Y. (50).
- *Fletcher, James, Ph. D., Dominion Entomologist, Experimental Farm, Ottawa, Can. (31). 1883. **F**
- *Fletcher, Robert, M. D., Army Medical Museum, Washington, D. C. (29). 1881. **F H**
- Fletcher, Robert, Ph. D., Director of Thayer School of Civil Engineering, Hanover, N. H. (51). **D**
- Flickinger, Junius R., Sc. D., Principal of Normal School, Pres., Pa. Educational Assn., Normal School, Lock Haven, Pa. (51).
- *Flint, Albert S., Washburn Observatory, Madison, Wis. (30). 1887. **A**
- *Flint, Austin, M. D., LL.D., Professor of Physiology, Cornell University Medical College, New York, N. Y. (50). 1901. **F K**
- *Flint, James M., Surgeon U. S. N., The Portland, Washington, D. C. (28). 1882. **F**
- Focke, Theodore M., Case School of Applied Science, Cleveland, Ohio. (44). **A B**
- *Foley, Prof. Arthur Lee, Indiana University, Bloomington, Ind. (46). 1900. **B**
- Folkmar, Daniel, D. S. S., D. U. Paris, care. Mrs Geo. Cuddeback, 5 Glen Etta St., Janesville, Wis. (46). **H**
- Folsom, David M., Stanford, University, Cal. (51). **E**
- Foote, James S., M. D., Creighton Medical College, Omaha, Neb. (50). **F K**
- Foote, Warren M., 311 N. 33d St., Philadelphia, Pa. (50). **C**
- Forbes, Robert H., Professor of Chemistry, University of Arizona, Tucson, Arizona. (50). **C**
- Ford, James B., 4 East 43d St., New York, N. Y. (49).
- Fort, I. A., U. P. Land Agent, North Platte, Neb. (51).
- Foster, Macomb G., P. O. Box 1120, New York, N. Y. (49).
- Foster, William, Newburgh, N. Y. (50). **I**
- Fowler, Edwin H., U. S. C. and G. Survey, Washington, D. C. (47).
- Fox, Charles James, M. D., Lock Box A, Willimantic, Conn. (51). **K**
- *Fox, Oscar C., U. S. Patent Office, Washington, D. C. (36). 1891. **A B D**
- Fox, William, Asst. Professor Physics, College of the City of New York, New York, N. Y. (50). **B D**
- Fraenkel, Joseph, M. D., 46 East 75th St., New York, N. Y. (50). **K**
- Francis, Charles Kenworthy, Ph. B., Adjunct Prof. of Chemistry, Ga. School of Technology, Atlanta, Ga. (50). **C**
- Francisco, M. Judson, 49 Merchants' Row, Rutland, Vt. (50). **I**
- *Frankforter, George B., University of Minnesota, Minneapolis, Minn. (43). 1901. **C**
- Frankland, Frederick W., 346 Broadway, New York, N. Y. (50).
- *Franklin, Mrs. C. Ladd, 516 Park Ave., Baltimore, Md. (47). 1899. **H**

MEMBERS AND FELLOWS.

- *Franklin, Edward Curtis, Ph. D., Kansas State Univ., Lawrence, Kan. (47). 1900. **B G**
- *Franklin, William S., Lehigh University, So. Bethlehem, Pa. (36). 1892. **B**
- *FRAZER, DR. PERSIFOR, Drexel Building, Room 1042, Philadelphia, Pa. (24). 1879. **C E**
- *Frazier, Prof. B. W., Lehigh University, So. Bethlehem, Pa. (24). 1882. **C E**
- *Frear, William, State College, Pa. (33). 1886. **C**
- Frederick, Charles Warnock, U. S. Naval Observatory, Washington, D. C. (50). **A B C**
- Freeborn, George C., M. D., 215 West 70th St., New York, N. Y. (50). **K**
- *Freedman, William Horatio, Professor of Electrical Engineering, University of Vermont, Burlington, Vt. (50). 1901. **B D**
- Freeman, Charles, Ph. D., Director of Clark Chemical Laboratory, Westminster College, New Wilmington, Pa. (50). **C**
- Freeman, Prof. T. J. A., St. John's College, Fordham, New York, N. Y. (33). **B C**
- *Freer, Prof. Paul C., Ann Arbor, Mich. (39). 1891. **C**
- Freley, Jasper Warren, Wells College, Aurora, N. Y. (45). **B E**
- *French, Prof. Thomas, Jr., 114 N. Ingalls St., Ann Arbor, Mich. (30). 1883. **B**
- Fretz, Augustus Henry, Doylestown, Pa. (50).
- Fretz, John Edgar, M. D., 112 North 3d St., Easton, Pa. (46). **F G H**
- Frick, Prof. John H., Central Wesleyan College, Warrenton, Mo. (27). **A B E F**
- Friedenwald, Harry, M. D., Associate Prof. of Ophthalmology and Otology, College of Phys. and Surgs., 1029 Madison Ave., Baltimore, Md. (51). **K**
- Friend, Samuel Henry, M. D., 141 Wisconsin St., Milwaukee, Wis. (51). **K**
- *Fries, Dr. Harold H., 92 Reade St., New York, N. Y. (40). 1898. **C**
- FRISBIE J. F., M. D., Box 455, Newton, Mass. (29). **E H**
- *Frisby, Prof. Edgar, U. S. Naval Observatory, Washington, D. C. (28). 1880. **A**
- *Frost, Edwin Brant, Yerkes Observatory, Williams Bay, Wis. (38). 1890. **A B**
- Frost, George H., C. E., Editor of "Engineering News," 220 Broadway, New York, N. Y. (50). **B D**
- Frost, Miss Lucy Ames, 35 Robinson St., Dorchester, Mass. (47). **B**
- Frost, William Dodge, Instructor in Bacteriology, University of Wisconsin, Madison, Wis. (50). **F**
- FROTHINGHAM, MRS. FREDERICK, 152 Pautucket St., Lowell, Mass. (31). **A F I**
- Fuller, Arthur Levens, Brunner, Kans. (50). **C**

MEMBERS AND FELLOWS.

- Fuller, Charles Gordon, M. D., Reliance Building, Chicago, Ill. (35). **F**
- Fuller, George W., 100 William St., New York, N. Y. (50).
- *Fuller, Prof. Homer T., President Drury College, Springfield, Mo. (35). 1891. **C E**
- *Fuller, Melville W., LL.D., Chief Justice U. S. Supreme Court, 1800 Massachusetts Ave., Washington, D. C. (40). 1901. **I**
- FULLER, MYRON L., Assistant Geologist, U. S. Geological Survey, Washington, D. C. (50). **E**
- Fullmer, Edward Lawrence, Prof. of Natural Science, Dakota Univ., Mitchell, S. D. (50). **F**
- *Fulton, Robert B., Chancellor Univ. of Mississippi, University, Miss. (21). 1887. **A B**
- Fulton, Weston Miller, Instructor in Meteorology, University of Tennessee, Knoxville, Tenn. (50). **B**
- Furlow, Floyd Charles, Professor of Experimental Engineering, Georgia School of Technology, Atlanta, Ga. (50). **D**
- *Furness, Miss Caroline E., Vassar College Observatory, Poughkeepsie, N. Y. (47). 1899. **A**
- Gable, George D, Ph. D., Parsons College, Fairfield, Iowa. (40). **A B.**
- *Gage, Prof. Simon Henry, Cornell University, Ithaca, N. Y. (28). 1881. **F**
- *Gage, Mrs. Susanna Phelps, Ithaca, N. Y. (48). 1900. **F**
- Gage-Day, Mary, M. D., 207 Wall St., Kingston-on-Hudson, N. Y. (51). **K**
- Gager, C. Stuart, Professor of Biologic Science, New York State Normal College, Albany, N. Y. (50). **F G**
- Gahagan, William L., M. D., 141 Broadway, New York, N. Y. (51). **K**
- Gaither, George R., ex-Attorney General of Maryland, 1310 Continental Bldg., Baltimore, Md. (50). **I**
- *Galbraith, Prof. John, School of Practical Science, Toronto, Can. (38). 1889. **D**
- *Galloway, B. T., U. S. Dept. Agriculture, Washington, D. C. (37). 1890. **G**
- *Galloway, Thomas Walton, Professor of Biology, Missouri Valley College, Marshall, Mo. (45). 1901. **F G**
- *Ganong, Wm. F., Professor of Botany, Smith College, Northampton, Mass. (49). 1900. **G**
- Gantt, Henry Lawrence, Consulting Enigneer, care American Locomotive Co., Schenectady, N. Y. (51). **D I**
- Garcin, Ramon D., M. D., 2618 E. Broad St., Richmond, Va. (51). **K**
- Gardiner, Charles Fox, M. D., 818 N. Cascade Ave., Colorado Springs, Colo. (51). **K**

MEMBERS AND FELLOWS.

- Gardiner, Edward G., Ph. D., 131 Mt. Vernon St., Boston, Mass. (51).
- Gardiner, Rev. Frederic, Jr., Yeates School, Lancaster, Pa. (47). **F H**
- Gardner, Rev. Corliss B., Ripley, N. Y. (29). **A B I**
- Gardner, Geo. Clinton, 416 Beach St., N., Richmond Hill, New York, N. Y. (50).
- Garland, Jos. E., M. D., 17 Pleasant St., Gloucester, Mass. (51). **K**
- Garnier, Madame Laure Russell, The Castle, Tarrytown, N. Y. (40).
- Garrett, Albert O., Fort Scott, Kansas. (50). **G**
- Garriott, Edward B., U. S. Weather Bureau, Washington, D. C. (49).
- Garver, John A., 44 Wall St., New York, N. Y. (49).
- Garvin, John B., Instructor in Chemistry, High School District No. 1. Denver, Colo. (50). **C**
- Gates, Fanny Cook, Instructor in Physics, Woman's College, Baltimore, Md. (50). **A B**
- Gault, Franklin B., 602 N. I St., Tacoma, Wash. (43).
- Gause, Fred Taylor, Manager Standard Oil Co. of New York, T. and B. Dept. Yokohama, Japan. (40).
- Gauss, Robert, Editor "Denver Republican," Denver, Colo. (50). **I**
- Geisler, Joseph F., New York, Mercantile Exchange, New York, N. Y. (50).
- *GENTH, FRED. A., 103 N. Front St., Philadelphia, Pa. (32). 1900. **C E.**
- *Genthe, Karl Wilhelm, Ph. D., Instructor in Zoology, Trinity College, Hartford, Conn. (50). 1901. **F**
- *Germann, George B., 90 Norman Ave., Brooklyn, N. Y. (49). 1901. **A**
- Getman, Frederick H., Johns Hopkins University, Baltimore, Md. (45). **B**
- *Gibbs, Prof. J. Willard, New Haven, Conn. (33). 1885. **B**
- *GIBBS, PROF. WOLCOTT, Newport, R. I. (1). 1896. **B C**
- *Gies, William J., College of Physicians and Surgeons, 437 West 59th St., New York, N. Y. (49). 1901. **C**
- Giffin, Frank Albee, 419 W. 118th St., New York, N. Y. (50). **A B**
- Gifford, Harold, M. D., 405 Karbach Block, Omaha, Neb. (51). **K**
- Gifford, John Clayton, Asst. Professor of Forestry, New York State College of Forestry, Ithaca, N. Y. (50). **G**
- Gilbert, Charles B., Educator, 106 Brunswick St., Rochester, N. Y. (50). **I**
- *GILBERT, G. K., U. S. Geol. Survey, Washington, D. C. (18). 1874. **E**
- *Gill, Adam Capen, Cornell University, Ithaca, N. Y. (38). 1894. **E**
- *Gill, Augustus Herman, Mass. Institute Technology, Boston, Mass. (44). 1896. **C**
- *Gill, Theodore Nicholas, M. D., Cosmos Club, Washington, D. C. (17). 1874. **F**

MEMBERS AND FELLOWS.

- *Gillette, Clarence P., Professor of Zoology, Agricultural College, Fort Collins, Colo. (50). 1901. **F**
- Gilman, Charles Edward, Stanford University, Cal. (51). **E**
- *Gilman, Daniel C., Johns Hopkins University, Baltimore, Md. (10). 1875. **E H**
- Girty, George H., Ph. D., U. S. Geol. Survey, Washington, D. C. (48).
- Glaser, C., Analytical and Consulting Chemist, 21 S. Gay St., Baltimore, Md. (49).
- Gleason, H. Allan, Asst. in Botany, Univ. of Illinois, Champaign, Ill. (50). **G**
- Gleason, W. Stanton, M. D., 143 Grand St., Newburgh, N. Y. (50). **F K**
- Glenn, L. C., Ph. D., Professor of Geology, Vanderbilt University, Nashville, Tenn. (50). **E**
- *Glenn, William, 1348 Block St., Baltimore, Md. (33). 1893. **C**
- GLENNY, WILLIAM H., Buffalo, N. Y. (25).
- Godfrey, Chas. C., M. D., 753 Lafayette St., Bridgeport, Conn. (51). **K**
- Godkin, Mrs. E. L., 36 W. 10th St., New York, N. Y. (49).
- *Goessmann, Prof. C. A., Mass. Agric. College, Amherst, Mass. (18). 1875. **C**
- Gold, Rev. Dr. James Douglas, Covington, Ohio. (50). **I**
- *Gold, Theodore S., West Cornwall, Conn. (4). 1887. **B C**
- Golden, Harry E., Civil Engineer, Mann Building, Utica, N. Y. (51). **D**
- *Golden, Miss Katherine E., Purdue University, Lafayette, Ind. (42). 1897. **G**
- Goldsborough, John Byron, Croton-on-Hudson, N. Y. (51).
- *Goldschmidt, S. A., Ph. D., 43 Sedgwick St., Brooklyn, N. Y. (24). 1880. **B C E**
- *Goldsmith, Edw., 658 N. 10th St., Philadelphia, Pa. (29). 1892. **B C**
- Goldthwaite, Miss Nellie Esther, Mount Holyoke College, So. Hadley, Mass. (47). **C**
- Gomberg, Moses, Sc. D., 1101 E. University Ave., Ann Arbor, Mich. (51). **C**
- *Gooch, Frank A., Yale University, New Haven, Conn. (25). 1880. **C**
- *Goodale, Prof. George Lincoln, Botanic Gardens, Cambridge, Mass. (18). 1875. **G**
- Goodale, Joseph Lincoln, M. D., 397 Beacon St., Boston, Mass. (50). **F K**
- Goodnow, Henry R., 95 Riverside Drive, New York, N. Y. (32). **B**
- *Goodspeed, Arthur Willis, Ph. D., Dept. Physics, University of Pennsylvania, Philadelphia, Pa. (47). 1898. **A B**
- Goodwin, Elmer Forrest, Principal and Prof. Physics and Chemistry Concord Branch, West Virginia State Normal School, Athens, W. Va. (50). **B C**

MEMBERS AND FELLOWS.

- *Goodwin, Harry M., Professor of Physical Chemistry, Mass. Institute Technology, Boston, Mass. (47). 1901. **B**
- Goodyear, William H., Museum of Brooklyn Institute of Arts and Sciences, Eastern Parkway, Brooklyn, N. Y. (43). **H**
- Gordon, Clarence McC., Ph. D., Centre College, Danville, Ky. (48).
A B C
- Gordon, Gustavus Ede, Scientific Director, Walker Gordon Laboratory Co., 1120 Conn. Ave., N. W., Washington, D. C. (51). **F**
- Gordon, Reginald, 315 W. 71st St., New York, N. Y. (50).
- Gordon, Robert H., Cumberland, Md., (48). **E F**
- Gore, J. W., Professor Physics, Univ. of N. C., Chapel Hill, N. C. (51). **B**
- *Goss, Prof. Wm. F. M., Lafayette, Ind. (39). 1896.
- Gossard, Harry Arthur, Professor of Entomology, Florida Agricultural College, Lake City, Fla. (51). **F**
- Goucher, John Franklin, President of The Woman's College, Baltimore, Md. (50).
- Gould, George Milbry, M. D., 1631 Locust St., Philadelphia, Pa. (51). **K**
- Gouldy, Miss Jennie A., Newburgh, N. Y. (50). **I**
- Grabill, H. P., 1004 Enas Ave., Des Moines, Iowa. (50). **C**
- Graef, Edw. L., 58 Court St., Brooklyn, N. Y. (28). **F**
- Graham, Douglas, M. D., 74 Boylston St., Boston, Mass. (51). **K**
- Graham, James Chandler, Chemist, Phillips Academy, Andover, Mass. (50). **C**
- Graham, Robert Dunn, 52 Broadway, New York, N. Y. (50).
- Granbery, Julian Hastings, Engineer and Electrician, 561 Walnut St., Elizabeth, N. J. (50). **D**
- Granger, Arthur O., Cartersville, Ga. (50). **A B**
- Grant, U. S., Ph. D., Professor of Geology, Northwestern University, Evanston, Ill. (50). **G**
- Grant, Willis Howard, 744 South Ave., Wilkensburg, Pa. (51). **C G**
- Granville, William Anthony, Ph. D., Instructor in Mathematics, Yale University, New Haven, Conn. (50). **A**
- *Gratacap, L. P., 77th St. and 8th Ave., New York, N. Y. (27). 1884. **C E F**
- *Gray, Prof. Thomas, Terre Haute, Ind. (38). 1889. **D**
- Greef, Ernest F., 37 W. 88th St., New York, N. Y. (49).
- *Green, Arthur L., Purdue University, Lafayette, Ind. (33). 1888. **C**
- Green, Bernard Richardson, Civil Engineer, Supt. of Congressional Library Building, 1738 N St., N. W., Washington, D. C. (51).
B D
- Greene, Chas. Lyman, M. D., 150 Lowry Arcade, St. Paul, Minn. (51). **K**
- *Greene, Charles Wilson, Ph. D., Professor of Physiology, State University of Missouri, Columbia, Mo. (50). 1901. **F K**

MEMBERS AND FELLOWS.

- Green, Edgar Moore, M. D., Easton, Pa. (36). **C G H**
- Greene, G. K., 127 W. Market St., New Albany, Ind. (38).
- Green, Horace, care "Sunday Journal," 15 Spruce St., New York, N. Y. (50).
- Green, Miss Isabella M., 111 Union Place, Akron, Ohio. (47).
- Greene, J. Evarts, 98 Lincoln St., Worcester, Mass. (47). **I**
- Greene, Jacob L., President Mut. Life Insurance Co., Hartford, Conn. (23).
- Green, Milbrey, M. D., 567 Columbus Ave., Boston, Mass. (29).
- Greenalch, Wallace, Deputy City Engineer, Albany, N. Y. (51). **D**
- Greenleaf, Robert Willard, M. D., 561 Boylston St., Boston, Mass. (47).
- *Greenman, Jesse M., 875 Doan St., Cleveland, Ohio. (47). 1899. **G**
- Greenough, Charles Pelham, Attorney at law, 39 Court St., Boston, Mass. (50). **I**
- Greenough, John, 31 W. 35th St., New York, N. Y. (49).
- Gregg, William H., M. D., Port Chester, N. Y. (49).
- Gregory, Miss Emily Ray, Ph. D., Professor of Biology, Wells College, Aurora, N. Y. (50). **F**
- Gregory, Herbert E., Yale University, New Haven, Conn. (50). **E**
- Griffin, Gen. Eugene, First Vice-President, General Electric Co., 44 Broad St., New York, N. Y. (50). **D**
- Griffith, C. J., Instructor in Dairying, Agricultural College, Fort Collins, Colo. (50). **F**
- Griffith, Daniel J., 21 W. 56th St., New York, N. Y. (49).
- Griffith, Herbert Eugene, Professor of Chemistry, Knox College, Galesburg, Ill. (50). **C**
- Griffith, John Howell, Professor of Mathematics and Civil Engineering, Clarkson School of Technology, Potsdam, N. Y. (50). **D**
- Griffith, Miss Mary Dechert, 3914 Walnut St., Philadelphia, Pa. (47). **B C**
- Griffith, W. W., Instructor in Physics, State University, Columbia, Mo. (50). **B**
- Griffiths, David, Div. Agrostology, U. S. Dept. Agriculture, Washington D. C. (49). **G**
- *Grimes, James Stanley, 1422 Wesley Ave., Evanston, Ill. (17). 1874. **E H**
- Grimm, Carl Robert, Bridge and Structural Engineer, 103 N. Main St., Mt. Vernon, Ohio. (51). **D**
- *Grindley, Dr. Harry Sands, Associate Professor of Chemistry, University of Illinois, Urbana, Ill. (46). 1898. **C**
- *Grinnell, George Bird, 346 Broadway, New York, N. Y. (25). 1885. **E F**
- Griswold, Clifford S., Head of Dept. of Physics, Groton School, Groton, Mass. (50). **B**

MEMBERS AND FELLOWS.

*Griswold, Leon Stacy, 238 Boston St., Dorchester, Mass. (38). 1893.

E

Grosskopf, Ernest C., M. D., Medical Superintendent Milwaukee County Hospital, Wauwatosa, Wis. (51). K

Grosvenor, Gilbert H., "National Geographic Magazine," Corcoran Bldg., Washington, D. C. (48). E I

*Grout, Abel J., Boys' High School, Brooklyn, N. Y. (47). 1899. G

Grover, Frederick Orville, Professor of Botany, Oberlin College, Oberlin, Ohio. (50) G

*Gruener, Hippolyte, Adelbert College, Cleveland, Ohio. (44). 1898.

*Gulliver, F. P., St. Marks School, Southboro, Mass. (40). 1900 E

Gummere, Henry Volkmar, Professor of Mathematics, Physics and Astronomy, Ursinus College, Collegeville, Pa. (51). A B

Guth, Morris S., M. D., Supt. State Hospital for the Insane, Warren, Pa. (51). K

*Guthe, Karl E., Ph. D., 904 S. State St., Ann Arbor, Mich. (45). 1897. D

Guthrie, William Alvis, M. D., Franklin, Ky. (51). K

Guthrie, William E., M. D., Bloomington, Ill. (51). K

Gutiérrez, Manuel R., Professor of Physics, Normal School, Calle de las Victimias num. 1, Jalapa, Vera Cruz, Mexico. (50). B

*Hagar, Stansbury, 179 Kingston Ave., Brooklyn, N. Y. (43). 1899.

*Hague, Arnold, U. S. Geol. Survey, Washington, D. C. (26). 1879.

E

Hague, James D., 18 Wall St., New York, N. Y. (50).

Haight, Stephen S., C. E., 2085 Daly Ave., West Farms, New York, N. Y. (31). D

*Haines, Reuben, Haines and Chew Sts., Germantown, Philadelphia, Pa. (27). 1889. B C

*Hale, Albert C., Ph. D., 352A Hancock St., Brooklyn, N. Y. (29). 1886. B C

Hale, George D., 1059 Lake Ave., Rochester, N. Y. (41).

*Hale, George E., Yerkes Observatory, Williams Bay, Wis. (37). 1891. A B C

*Hale, William H., Ph. D., 40 First Place, Brooklyn, N. Y. (19). 1874. A B C E F H I

*Hall, Asaph, U. S. N., South Norwalk, Conn. (25). 1877. A

*Hall, Asaph, Jr., University of Michigan, Ann Arbor, Mich. (38). 1890. A

Hall, Charles M., Vice-President Pittsburg Reduction Co., Niagara Falls, N. Y. (50). C

*Hall, C. W., Dean College of Engineering Met. and Mechan. Arts, University of Minnesota, Minneapolis, Minn. (28). 1883. D E

Hall, Edwin Bradford, Wellsville, N. Y. (50).

*Hall, Edwin H., 5 Avon St., Cambridge, Mass. (29). 1881. B

MEMBERS AND FELLOWS.

- Hall, Fred. C., Jr., M. D., Cuba, Kansas, (51). **K**
- Hall, James P., 6 Poplar St., Brooklyn, N. Y. (40). **A B**
- Hall, Joseph Underwood, M. D., 216 Autumn St., San José, Cal. (51). **K**
- Hall, Lyman, President of Georgia School of Technology, Atlanta, Ga. (50).
- *Hall, Prof. Lyman B., Haverford College, Haverford, Pa. (31). 1884. **C**
- Hall, Robert William, 2 Hillhouse Ave., New Haven, Conn. (50). **F**
- Hall, William Bonnell, M. D., Professor of Materia Medica and Physiology, University of the South, Sewanee, Tenn. (51). **K**
- Hall, William Shafer, Professor of Mining and Graphics, Lafayette College, Easton, Pa. (50). **E**
- Hallack, H. Tuthill, M. D., Alcott, Colo. (51). **K**
- Halley, Robert Burns, Professor of Physics and Chemistry, Sam Houston Normal Institute, Huntsville, Texas. (50). **B C**
- *Hallock, Albert P., Ph. D., 440 First Ave., New York, N. Y. (31). 1896. **C**
- Hallock, Frank Kirkwood, M. D., Cromwell, Conn. (50). **K**
- *Hallock, Dr. William, Columbia University, New York, N. Y. (40). 1893. **B E**
- *Hallowell, Prof. Susan M., Wellesley College, Wellesley, Mass. (33). 1890. **G**
- *Halsted, Byron D., Rutgers College, New Brunswick, N. J. (29). 1883. **G**
- *Halsted, George Bruce, M. D., 2407 Guadalupe St., Austin, Texas. (43). 1896.
- Halsted, William Stewart, 1201 Eutaw Place, Baltimore, Md. (50).
- Ham, Judson B., Teacher Natural Science, Vt. State Normal School, Johnson, Vermont. (50). **F G**
- *Hamaker, John Irvin, Professor of Geology and Biology, Trinity College, Durham, N. C. (50). 1901. **E F**
- *Hambach, Dr. G., 1319 Lami St., St. Louis, Mo. (26). 1891. **E F**
- Hammatt, Clarence Sherman, Electrical and Mechanical Engineer, Jacksonville, Fla. (50). **D**
- Hammel, Wm. C. A., Department of Physics, State Normal School, Baltimore, Md. (50). **B F**
- Hammond, Mrs. Eliza F., 645 Jefferson Ave., Detroit, Mich. (46).
- Hammond, George W., Hotel Hamilton, 260 Clarendon St., Boston, Mass. (47).
- *Hammond, John Hays, Mining Engineer, Denver, Colo. (50). 1901. **D E**
- Hammond, Mrs. John Hays, Denver, Colo. (50). **H**
- *HANAMAN, C. E., Troy, N. Y. (19). 1883. **F**
- Hance, Anthony M., 2024 DeLancey Place, Philadelphia, Pa. (51). **C**

MEMBERS AND FELLOWS.

- Hancock, James Cole, M. D., 43 Cambridge Place, Brooklyn, N. Y. (51). **K**
- Hard, Jas. M. B., Cordobanes 16, City of Mexico, Mexico. (50). **C**
- *Harding, Everhart Percy, Instructor in Chemistry, University of Minnesota, Minneapolis, Minn. (50). 1901. **C**
- Harding, Harry A., State Experiment Station, Geneva, N. Y. (48). **G**
- Hardy, Edward R., 31 Allen St., Boston, Mass. (49). **I**
- *Hargitt, Prof. Charles W., Syracuse University, Syracuse, N. Y. (38). 1891. **F**
- *HARKNESS, WILLIAM, U. S. Naval Observatory, Washington, D. C. (26). 1878. **A B C D**
- Harmon, Miss A. Maria, 171 McLaren St., Ottawa, Can. (31). **F H**
- Harmon, Mrs. Israel, Springfield, Mass. (43).
- Harnly, Henry Jacob, Ph. D., Professor of Biology, McPherson College, McPherson, Kan. (50). **F G**
- *Harper, Charles A., Ph. D., 2139 Gilbert Ave., Cincinnati, Ohio. (40). 1899. **C**
- *Harper, Henry Winston, M. D., The University of Texas, Austin, Texas. (45). 1899. **C**
- Harper, R. H., M. D., Afton, Indian Ter. (51). **F K**
- Harrah, C. J., P. O. Box 1606, Philadelphia, Pa. (48). **H**
- *Harris, Abram Winegardner, Sc. D., Port Deposit, Md. (40). 1895. **C**
- Harris, Mrs. Carolyn W., 125 St. Marks Ave., Brooklyn, N. Y. (50). **G**
- *Harris, Prof. E. P., Amherst College, Amherst, Mass. (44). 1896.
- Harris, Frederick S., Monticello, Kansas. (50). **E**
- HARRIS, J. CAMPBELL, 119 So. 16th St., Philadelphia, Pa. (51).
- *Harris, Rollin Arthur, U. S. C. and G. Survey, Washington, D. C. (47). 1899. **A**
- *Harris, Uriah R., Commander, U. S. N., Room 225, Custom House, St. Louis, Mo. (34). 1886. **A**
- Harrison, Judge Lynde, 52 Hillhouse Ave., New Haven, Conn. (50). **I**
- *Harrison, Robert Henry, M. D., Columbus, Texas. (50). **F K**
- [Hart, Charles A., Assistant to State Entomologist, Univ. of Illinois, Urbana, Ill. (51). **F**
- *Hart, Edw., Ph. D., Lafayette College, Easton, Pa. (33). 1885. **C**
- Hart, James Norris, Professor of Mathematics and Astronomy, Univ. of Maine, Orono, Maine. (51). **A**
- Hart, Miss Mary Elizabeth, Prospect Hill, Greenfield, Mass. (51). **G**
- Hart, Rev. Prof. Samuel, Berkeley Divinity School, Middletown, Conn. (22). **A**
- Hartley, Chas. P., Assistant in Plant Breeding, Bureau of Plant Industry, Dept. Agriculture, Washington, D. C. (51). **G**

MEMBERS AND FELLOWS.

- Hartley, Frank, Principal of Allegheny County Academy, Cumberland, Md. (51). **E G**
- Hartness, James, President of Jones and Lamson Machine Co., Springfield, Vt. (51). **D**
- Hartz, J. D. Aug., College Point, N. Y. (43).
- Hartzell, Prof. J. Culver, Illinois Wesleyan Univ., Bloomington, Ill. (49). **E**
- Harvey, Wm. Stocker, 119 So. 4th St., Philadelphia, Pa. (47).
- Hasie, Montague S., C. E., Manager of American Bridge Co., of New York, Dallas, Texas. (51). **D**
- *Haskell, Eugene E., Campeau Building, Detroit, Mich. (39). 1896. **A B D**
- ! Hasslacher, Jacob, 100 William St., New York, N. Y. (50).
- *HASTINGS, C. S., Sheffield Scientific School, Yale University, New Haven, Conn. (25). 1878. **B**
- Hastings, Edwin George, R. R. No. 2, Ashtabula, Ohio. (50). **F**
- Hatcher, John Bell, Carnegie Museum, Pittsburg, Pa. (50). **E F**
- Haupt, Herman, C. E., The Concord, Washington, D. C. (51). **D**
- Haupt, Gen. Lewis Muhlenberg, C. E., Consulting Engineer, 107 North 35th St., Philadelphia, Pa. (51). **D**
- Havemeyer, W. F., 32 Nassau St., New York, N. Y. (50).
- Hawkins, J. Dawson, Colorado Springs, Colo. (50). **C D**
- *Hay, Prof. Oliver Perry, Amer. Mus. Nat. History, Central Park, New York, N. Y. (49). 1901. **F**
- Hay, Prof. William P., 1316 Wallach Place, N.W., Washington, D. C. (49).
- Hayes, George Washington, C. E., Lebanon, Pa. (51). **C D**
- Hayes, Joel Addison, Banker, Colorado Springs, Colo. (51).
- Hayes, Noah, M. D., Seneca, Nemaha Co., Kansas. (51). **K**
- *Hayford, John F., C. E., U. S. C. and G. Survey, Washington, D. C. (46). 1898. **A B D**
- Haynes, Prof. Arthur E., College of Engineering, University of Minnesota, Minneapolis, Minn. (45).
- *Haynes, Prof. Henry W., 239 Beacon St., Boston, Mass. (28). 1884. **H**
- Haynes, Miss Julia Anna, Emma Willard School, Troy, N. Y. (47). **F G**
- Hays, B. Frank, Bensonhurst, N. Y. (49).
- Hays, Charles I., care North Side High School, Denver, Colo. (50). **C G**
- *Hays, Willet M., Professor of Agriculture, University of Minnesota, St. Anthony Park, Minn. (45). 1901. **G I**
- Haywood, Prof. John, Otterbein University, Westerville, Ohio. (30). **A B**
- Hazard, Daniel L., U. S. C. and G. Survey, Washington, D. C. (48).

MEMBERS AND FELLOWS.

- Hazard, R. G., Peace Dale, R. I. (50).
- Hazen, Tracy Elliott, Director Fairbanks Museum, Saint Johnsbury, Vermont. (50). **G**
- Head, W. R., 5467 Jefferson Ave., Hyde Park, Chicago, Ill. (38). **F**
- Heald, Fred. DeForest, Ph. D., Professor of Biology, Parsons College, Fairfield, Iowa. (50). **F**
- Heath, Harry E., Chief Enigneer, The Eddy Electric Mfg. Co., Windsor, Conn. (50). **D**
- Hebden, Edwin, Principal of Group A, Public Schools, 730 Colorado Ave., Baltimore, Md. (50). **E**
- Heck, Chas. McGee, Raleigh, N. C. (51). **B**
- Hedgcock, George Grant, University of Nebraska, Lincoln, Neb. (50). **G**
- Hedge, Frederic H., Public Library, Lawrence, Mass. (28). **F H**
- *Hedrick, Henry B., Nautical Almanac Office, U. S. Naval Observatory, Washington, D. C. (40). 1896. **A**
- Heisler, Chas. L., M. E., Mgr. and Engineer, Heisler Pumping Engine Co., 909 W. 8th St., Erie, Pa. (51). **D**
- Heller, Napoleon B., Professor of Mathematics and Astronomy, Fort Worth University, Fort Worth, Texas. (50). **A**
- Hellick, Chauncey Graham, C. E., Ph. D., 203 Washington St., Chicago, Ill. (50). **D**
- Hemmeter, John C., M. D., Prof. in Medical Department Univ. of Maryland, 1734 Linden Ave., Baltimore, Md. (51). **K**
- Henderson, Joseph J., 689 10th St., Brooklyn, N. Y. (51).
- Henderson, Junius, County Judge, 1933 13th St., Boulder, Colo. (50).
- *Henderson, William Edward, Ph. D., Ohio State University, Columbus, Ohio. (50). 1901. **C**
- Hendricks, Henry H., 49 Cliff St., New York, N. Y. (30).
- Hennen, Ray Vernon, C. E., care Carter Oil Co., Sistersville, W. Va. (50). **D**
- Henrich, Carl, Mining Engineer, Union Copper Mining Co., Gold Hill, N. C. (50). **A E I**
- *Henry, Alfred J., U. S. Weather Bureau, Washington, D. C. (49). 1901. **B**
- Henry, Charles C., M. D., 56 Clark St., Brooklyn, N. Y. (43).
- Hensel, Samuel Theodore, 801 E. Colfax Ave., Denver, Colo. (50). **C G.**
- Henzey, Sam'l Alexander, Pres. of Raleigh and Western Railway Co., 52 Broadway, New York, N. Y. (51).
- Herbert, Arthur P., Engineer and Supt. Colima Division, Compania Constructora Nacional Mexicana, Colima, Colima, Mex. (51). **D**
- Hering, Daniel Webster, Professor of Physics, New York University, University Heights, New York, N. Y. (50). **B D**

MEMBERS AND FELLOWS.

- *Hering, Rudolph, 170 Broadway, New York, N. Y. (33). 1885.
D E I
- Herndon, John Henry, Tyler, Tex. (51). **C E**
- Herr, Hiero B., Civil and Mining Engineer, 1246 Marquette Bldg., Chicago, Ill. (50). **E**
- *Herrick, C. Judson, Dennison University, Granville, Ohio. (49). 1901. **F**
- Herrick, Glenn W., Professor of Biology, A. and M. College, Agricultural College, Miss. (50). **F**
- HERRMAN, MRS. ESTHER, 59 West 56th St., New York, N. Y.
- Herrmann, Richard, Sec'y Iowa Institute of Science and Arts, Dubuque, Iowa. (50). **C E**
- Hersom, Jane Loid, M. D., 106 Pine St., Portland, Me. (51). **K**
- Herter, Christian A., M. D., 819 Madison Ave., New York, N. Y. (50). **K**
- Herthel, Adolph, 1739 Waverly Place, St. Louis, Mo. (50). **I**
- *Herty, Charles Holmes, Ph. D., Ocilla, Ga. (42). 1895. **C**
- *Hervey, Rev. A. B., Bath, Me. (22). 1879. **F**
- Herzog, Felix Benedict, Ph. D., President Herzog Teleseme Co., 51 West 24th St., New York, N. Y. (50). **D**
- Hesse, Conrad E., U. S. Weather Bureau, Washington, D. C. (50).
A
- Heston, John W., President South Dakota Agricultural College, Brookings, S. D. (50). **I**
- Hewett, Edgar L., President New Mexico Normal University, East Las Vegas, N. M. (50). **H**
- Hewitt, Hon. Abram S., 9 Lexington Ave., New York, N. Y. (49).
- Hewitt, Charles N., M. D., LL.D., Secretary State Board of Health, Red Wing, Minn. (50). **K**
- HEXAMER, C. JOHN, C. E., 419 Walnut St., Philadelphia, Pa. (33).
B C
- Heyer, Wm. D., 523 South Broad St., Elizabeth, N. J. (33). **B D**
- Hice, Richard R., Beaver, Pa. (51). **E**
- Higdon, John Clark, 605 Union Trust Bldg., St. Louis, Mo. (50).
B D I
- Higgins, F. W., M. D., 20 Court St., Cortland, N. Y. (51). **K**
- Higginson, James J., 16 E. 41st St., New York, N. Y. (49).
- Higginson, John A., 260 Clarendon St., Boston, Mass. (50).
- Higley, Hon. Warren, 68 West 40th St., New York, N. Y. (43).
- Hildreth, John L., 14 Garden St., Cambridge, Mass. (50).
- *Hilgard, Prof. E. W., Univ. of California, Berkeley, Cal. (11). 1874. **B C E**
- Hill, Bruce V., Grinnell, Iowa. (48). **B**
- Hill, Ebenezer, Treasurer, Norwalk Iron Works, South Norwalk, Conn. (50). **D**
- *Hill, George A., U. S. Naval Observatory, Washington, D. C. (47). 1900. **A**

MEMBERS AND FELLOWS.

- Hill, Gershom Hyde, Supt. State Hospital for the Insane, Independence, Iowa. (51). **K**
- *Hill, John Edward, Prof. of Civil Engineering, Brown University, Providence, R. I. (44). 1897. **D**
- *Hill, Robert Thomas, U. S. Geol. Survey, Washington, D. C. (36). 1889. **E**
- Hillig, Frederick, J., S. J., Professor of Sciences, Canisius College, Buffalo, N. Y. (50).
- Hillkowitz, Wm., M. D., 704 Race St., Cincinnati, Ohio. (50).
C F I K
- *Hillyer, Homer W., Ph. D., Chemical Laboratory, Univ. of Wisconsin, Madison, Wis. (42). 1896. **C**
- Hilton, William A., 435 Penn Ave., Waverly, N. Y. (49). **F**
- *Himes, Prof. Charles F., Carlisle, Pa. (29). 1882. **B C**
- Hine, James S., Ohio State Univ., Columbus, Ohio. (48). **F**
- *Hinrichs, Dr. Gustavus, 4106 Shenandoah Ave., St. Louis, Mo. (17). 1874. **B C**
- Hinton, John H., M. D., 41 W. 32d St., New York, N. Y. (29). **F H**
- Hirschberg, Michael H., Judge of Supreme Court, State of New York, Newburgh, N. Y. (50). **I**
- Hirschfelder, Jos. Oakland, M. D., Professor of Cl. Med. Cooper Medical College, 1392 Geary St., San Francisco, Cal. (51). **K**
- Hiss, P. Hanson, M. D., 28 Washington Square, N., New York, N. Y. (49). **K**
- *Hitchcock, Albert Spear, Div. Agrostology, U. S. Dept. Agriculture, Washington, D. C. (39). 1892. **G**
- Hitchcock, Miss Caroline Judson, Teacher in High School, Meriden, Conn. (50). **B E**
- *HITCHCOCK, CHARLES H., Hanover, N. H. (11). 1874. **E**
- Hitchcock, Embury A., 380 W. Eighth Ave., Columbus, Ohio. (48).
D
- Hitchcock, Miss Fanny R. M., 4038 Walnut St., Philadelphia, Pa. (35). **F**
- *Hitchcock, Frank H., Chief Section Foreign Markets, U. S. Dept. Agriculture, Washington, D. C. (49). 1901. **I**
- *Hitchcock, Romyne, Room 1804, 20 Broad St., New York, N. Y. (47). 1898. **B C**
- Hoadley, George A., Swarthmore College, Swarthmore, Pa. (40). 1900.
- Hoagland, Henry Williamson, M. D., 327 N. Nevada Ave., Colorado Springs, Colo. (51). **F K**
- Hobbs, Prof. Perry L., Western Reserve Medical College, Cleveland, Ohio. (41). **C**
- *Hobbs, William Herbert, Ph. D., Madison, Wis. (41). 1893. **E**
- Hobby, C. M., M. D., Iowa City, Iowa. (51). **K**
- Hodge, Frederick Humbert, Professor of Mathematics, Bethel College, Russellville, Ky. (50). **A**

MEMBERS AND FELLOWS.

- Hodge, James M., Big Stone Gap, Va. (29). **D E**
- Hodges, Miss Julia, 217 W. 44th St., New York, N. Y. (36). **E F H**
- Hodges, Thomas Edward, Professor of Physics, W. Va. State University, Morgantown, W. Va. (50). **B**
- *Hodgkins, Prof. H. L., Columbian University, Washington, D. C. (40). 1896. **A B**
- HOE, MRS. R., JR., 11 E. 36th St., New York, N. Y. (36).
- Hoe, Mrs. Richard M., 11 E. 71st St., New York, N. Y. (36).
- Hoffman, Christian B., Enterprise, Kansas. (50). **D H**
- Hoffman, Very Rev. Eugene Aug., D. D., 1 Chelsea Square, New York, N. Y. (36).
- *HOFFMANN, DR. FRIEDRICH, Charlottenburg, Kant St. 125, Berlin, Germany. (28). 1881. **C F**
- Hogeboom, Miss Allen C., Shelbyville, Ky. (46). **C**
- Holbrook, Henry R., Civil Engineer, Pueblo, Colo. (51). **D**
- Holbrook, Percy, Genl. Mgr. Weber Ry. Joint Mfg Co., 145 W. 69th St., New York, N. Y. (51). **D**
- Holbrow, Herman, L., Electrical Engineer, 112 Waverly Ave., Brooklyn, N. Y. (50). **D**
- Holden, Edwin R., 13 E. 79th St., New York, N. Y. (49).
- HOLDEN, MRS. L. E., The Hollenden, Cleveland, Ohio. (35).
- Holferty, George M., Instructor in Botany, University of Illinois, Urbana, Ill. (50). **G**
- *Holland, W. J., D. D., LL.D., Director Carnegie Museum, Pittsburg, Pa. (37). 1896. **F**
- *Hollick, Arthur, N. Y. Botanical Garden, Bronx Park, New York, N. Y. (31). 1892. **E G**
- Hollinshead, Warren H., Vanderbilt University, Nashville, Tenn. (37).
- Hollister, John James, Mining Engineer, Gaviota, Santa Barbara Co., Cal. (50). **E**
- Holmes, A. M., M. D., Jackson Block, Denver, Colo. (50). **F K**
- Holmes, Dr. Christian R., 8-10 East Eighth St., Cincinnati, Ohio. (48).
- Holmes, Frederic Harper, Instructor in Physics, Geography and Mathematics, State Normal School, Hyannis, Mass. (50). **A B E**
- *Holmes, Prof. Joseph A., State Geologist, Chapel Hill, N. C. (33). 1887. **E F**
- Holmes, Miss Mary S., 1331 Twelfth St., Philadelphia, Pa. (50). **E**
- Holsinger, Samuel J., Special Agent, Interior Department, Phoenix, Arizona. (50). **H**
- Holt, Chas., 255 W. 45th St., New York, N. Y. (51).
- Holt, Edwin B., Trinity Court, Dartmouth St., Boston, Mass. (49).
- Holt, Henry, 29 W. 23d St., New York, N. Y. (29).
- Holt, Herbert S., President, Montreal Light, Heat and Power Co., Montreal, Can. (51). **D**

MEMBERS AND FELLOWS.

- Holton, Henry D., M. D., Brattleboro, Vt. (44). **I**
- Homer, Charles S., Valentine & Co., 245 Broadway, New York, N. Y. (29).
- Hoobler, Bert Raymond, Cornell University, Ithaca, N. Y. (50).
F G
- Hood, William, 512 Van Ness Ave., San Francisco, Cal. (35). **D**
- Hooker, Donald R., Chemist, 1707 Fairmont Ave., Baltimore, Md. (50). **C K**
- Hooker, Prof. Henrietta E., Mt. Holyoke College, South Hadley, Mass. (45). **G**
- Hooper, Alcaeus, 710 Merchant's Bank, Baltimore, Md. (50). **I**
- Hooper, Prof. Franklin W., Curator Brooklyn Institute, Brooklyn, N. Y. (43).
- Hoover, William, Athens, Ohio. (49).
- Hopeman, H., M. D., Minden, Neb. (51). **K**
- *Hopkins, A. D., Ph. D., State University, Morgantown, W. Va. (42). 1899. **F**
- *Hopkins, Prof. Arthur John, Amherst College, Amherst, Mass. (44). 1900. **C**
- Hopkins, George B., 52 Broadway, New York, N. Y. (50).
- Hopkins, George I., Manchester, N. H. (47). **A B**
- *Hopkins, Grant S., Cornell University, Ithaca, N. Y. (41). 1900. **F**
- *Hopkins, Nevil Monroe, Asst. Professor of Chemistry, Columbian University, Washington, D. C. (48). 1901. **C D**
- *Hopkins, Thomas Cramer, Syracuse University, Syracuse, N. Y. (38). 1898. **E**
- Hormell, Prof. William G., Ohio Wesleyan Univ., Delaware, Ohio. (48). **B**
- Hornung, Christian, Professor of Mathematics and Astronomy, Heidelberg University, Tiffin, Ohio. (50). **A D**
- *Horsford, Miss Cornelia, 27 Craigie St., Cambridge, Mass. (46). 1897. **H**
- Hortvet, Julius, State Chemist, 1521 University Ave., S.E., Minneapolis, Minn. (50). **C**
- Hoskins, William, La Grange, Ill. (34). **C**
- Hosmer, Sidney, E. E., Boston Electric Light Co., 3 Head Place, Boston, Mass. (50). **D**
- Hotchkiss, Henry Stuart, 55 Hillhouse Ave., New Haven, Conn. (50). **E I**
- *Hough, Prof. G. W., Northwestern University, Evanston, Ill. (15). 1874. **A B D**
- Hough, Theodore, Ph. D., Assistant Professor of Biology, Mass. Institute of Technology, Boston, Mass. (51). **K**
- *Hough, Walter, U. S. National Museum, Washington, D. C. (38) 1890.
- Houk, Mrs. Eliza P. T., 41 W. Second St., Dayton, Ohio, (48).

MEMBERS AND FELLOWS.

- Houser, Gilbert L., Ph. D., Professor Animal Morphology and Physiology, University of Iowa, Iowa City, Iowa. (50). **F K**
- Houston, David Walker, M. D., Troy, N. Y. (51). **K**
- *Hovey, Edmund O., Amer. Mus. Nat. History, Central Park, New York, N. Y. (36). 1895. **C E**
- *Hovey, Rev. Horace C., 60 High St., Newburyport, Mass. (29). 1883. **E H**
- Howard, Charles P., 116 Farmington Ave., Hartford, Conn. (51).
- *Howard, Curtis C., 97 Jefferson Ave., Columbus, Ohio. (38). 1892. **C**
- *Howard, Leland O., Ph. D., Cosmos Club, Washington, D. C. (37). 1889. **F**
- Howard, Mrs. Leland O., 2026 Hillyer Place, N.W., Washington, D. C. (49). **H**
- Howard, Orson, M. D., Professor of Biology, University of Utah, Salt Lake City, Utah. (50). **F K**
- *Howard, S. Francis, Professor of Chemistry, Mass. Agricultural College, Amherst, Mass. (50). 1901. **C**
- Howard, Wm. Lee, M. D., 1126 N. Calvert St., Baltimore, Md. (51). **K**
- *Howe, Charles S., Case School of Applied Science, Cleveland, Ohio. (34). 1891. **A**
- *Howe, Henry M., Professor of Metallurgy, Columbia University, New York, N. Y. (50). 1901. **D**
- *Howe, Herbert Alonzo, Director of the Chamberlin Observatory, University of Denver, University Park, Colo. (50). 1901. **A**
- *Howe, Prof. Jas. Lewis, Washington and Lee University, Lexington, Va. (36). 1888. **C**
- Howe, J. Morgan, M. D., 12 West 46th St., New York, N. Y. (50).
- Howe, Marshall A., New York Botanical* Garden, Bronx Park, New York, N. Y. (49).
- *Howell, Edwin E., 612 17th St., N.W., Washington, D. C. (25). 1891. **E**
- Howell, John W., Ballantine Parkway, Newark, N. J. (50).
- *Howell, William H., M. D., Professor of Physiology, Johns Hopkins University, Baltimore, Md. (50). 1901. **F K**
- Howell, Wilson Stout, Sec'y Association of Edison Illuminating Companies, 14 Jay St., New York, N. Y. (50). **D**
- Hower, Harry Sloan, Instructor in Physics, Case School of Applied Science, Cleveland, Ohio. (50). **B**
- Howerth, Ira Woods, Instructor in Sociology, University of Chicago, , Chicago, Ill. (50). **I**
- Howland, Howard Newell, 116 S. 52d Ave., Chicago, Ill. (50). **F**
- *Hrdlicka, Alës, M. D., Amer. Mus. Nat. Hist., 77th St. and Central Park, West, New York, N. Y. (46). 1897. **H**
- Hubbard, Walter C., Coffee Exchange Bldg., New York, N. Y. (49).

MEMBERS AND FELLOWS.

- *Huber, G. Carl, M. D., Junior Professor of Anatomy and Director of Histological Laboratory, University of Michigan, Ann Arbor, Mich. (50). 1901. **F K**
- Huddleston, John H., M. D., 126 West 85th St., New York, N. Y. (51). **K**
- *Hudson, George H., Vice Principal, Dept. Natural Science, State Normal and Training School, Plattsburgh, N. Y. (31). 1901. **F**
- Hull, Gordon Ferrie, Professor of Physics, Dartmouth College, Hanover, N. H. (50). **B**
- Hume, Alfred, C. E., University Miss. (39). **A**
- Hummel, John A., Experiment Station, St. Anthony Park, Minn. (48).
- Humphrey, Richard L., Testing Laboratory, City Hall, Philadelphia, Pa. (48). **D**
- Humphreys, Alex. C., M. E., C. E., 31 Nassau St., New York, N. Y. (49).
- Hungerford, W. S., care of W. Ames & Co., Jersey City, N. J. (43). **D**
- Hunsicker, George W., 141 N. 8th St., Allentown, Pa. (50). **C**
- Hunt, Chas. Wallace, Stapleton, N. Y. (51).
- *Hunter, Andrew Frederick, Barrie, Ontario, Can. (38). 1896.
B H I
- Hunter, Chas. H., M. D., 13 Syndicate Block, Minneapolis, Minn. (51). **K**
- *Hunter, Prof. Joseph Rufus, Richmond College, Richmond, Va. (45). 1899. **C**
- Hunter, Samuel John, Associate Professor of Entomology, University of Kansas, Lawrence, Kansas (50). **F**
- Hunter, Walter David, Special Agent, U. S. Department Agriculture, Washington, D. C. (50). **F**
- Huntington, Edward Vermilye, Williams College, Williamstown, Mass. (47). **A**
- Huntington, Ellsworth, Highland St., Milton, Mass. (51).
- Hurd, E. O., Plainville, Ohio. (30). **E F**
- Huxley, Henry Minor, Hotel Hunnewell, Newton, Mass. (48).
- Hyams, Miss Isabel F., 26 Wales St., Dorchester, Mass. (47). **C**
- Hyde, B. T. Babbitt, 20 W. 53d St. New York, N. Y. (43). **D**
- Hyde, Charles Gilman, 6336 Burbridge St., Germantown, Pa. (47). **D**
- Hyde, Miss Edith E., U. S. Nat'l Museum, Washington, D. C. (50).
H I
- Hyde, E. Francis, 835 Fifth Ave., New York, N. Y. (43). **A**
- Hyde, Miss Elizabeth Mead, 210 E. 18th St., New York, N. Y. (49). **H**
- *Hyde, E. W., Station D, Cincinnati, Ohio. (25). 1881. **A**
- Hyde, Frederick E., M. D., 20 W. 53d St., New York, N. Y. (43).
E

MEMBERS AND FELLOWS.

- Hyde, Frederick E., Jr., 20 W. 53d St., New York, N. Y. (43). **H**
 Hyde, Henry St. J., 210 E. 18th St., New York, N. Y. (49).
 *Hyde, John, Statistician U. S. Dept. Agriculture, Washington, D. C. (47). 1898. **E I**
 *Iddings, Joseph P., Univ. of Chicago, Chicago, Ill. (31). 1884. **E**
 Iden, Thomas M., Professor of Chemistry and Physics, State Normal School, Emporia, Kansas. (50). **B C F**
 *ILES, GEORGE, 5 Brunswick St., Montreal, Can. (31). 1898. **I**
 Ill, Edward J., M. D., 1002 Broad St., Newark, N. J. (51). **K**
 Ingham, Wm. A., 320 Walnut St., Philadelphia, Pa. (33). **E**
 Ingram, Edward Lovering, C. E., Expert Aid, New York Navy Yard, New York, N. Y. (51). **A B C D**
 Inslee, Mrs. Samuel, 50 W. 72d St., New York, N. Y. (49).
 Iorns, Martin J., Mount Vernon, Ia. (50). **C G**
 *Ives, Frederick E., 2750 N. 11th St., Philadelphia, Pa. (44). 1898.
B
 *Jack, John G., Jamaica Plain, Mass. (31). 1890. **G**
 *Jackson, Prof. Charles L., Harvard University, Cambridge, Mass. (44). 1895. **C**
 Jackson, John H., M. D., 155 Franklin St., Fall River, Mass. (51).
K
 *Jackson, Dr. Robert T., 33 Gloucester St., Boston, Mass. (37). 1890. **F**
 Jackson, Victor H., M. D., D. D. S., 240 Lenox Ave., New York, N. Y. (51). **K**
 Jacobs, Henry Barton, M. D., Instructor in Medicine, Johns Hopkins Medical School, Baltimore, Md. (50). **K**
 Jacobs, Michael William, 222 Market St., Harrisburg, Pa. (50). **I**
 *Jacobus, David S., Stevens Institute, Hoboken, N. J. (36). 1889.
A B D
 *Jacoby, Harold, Columbia University, New York, N. Y. (38). 1891. **A**
 *Jacoby, Henry S., Prof. of Bridge Engineering and Graphics, Cornell University, Ithaca, N. Y. (36). 1892. **D**
 Jaffa, Myer Edward, Berkeley, Cal. (47).
 James, Bushrod W., A. M., LL.D., M. D., N.E. cor. 18th and Green Sts., Philadelphia, Pa. (29). **F**
 James, Charles C., Dept. Agriculture, Toronto, Can. (46). **I**
 James, Mrs. Sarah S., 1517 O St., N.W., Washington, D. C. (49).
H I
 *Jaques, Capt. William H., Little Boarshead, N. H. (47). 1899. **D**
 Jarman, Joseph L., President and Prof. of Chemistry, State Female Normal School, Farmville, Va. (51). **C**
 Jarvis, Samuel M., 1 West 72d St., New York, N. Y. (50).
 *Jastrow, Dr. Joseph, Univ. of Wisconsin, Madison, Wis. (35). 1887.
F H

MEMBERS AND FELLOWS.

- *Jayne, Horace. 318 S. 19th St., Philadelphia, Pa. (29). 1884. **F H**
 Jefferson, J. P., Manufacturer, Warren, Pa. (51). **D I**
 Jefferis, Wm. W., 442 Central Park, West, New York, N. Y. (33). **E**
 *Jeffries, B. Joy, M. D., 15 Chestnut St., Boston, Mass. (29). 1881.
F H
 Jelly, George Frederick, M. D., 69 Newbury St., Boston, Mass.
 (50). **F K**
 *Jenkins, Edw. H., Drawer 101, New Haven, Conn. (33). 1885. **C**
 Jenks, Albert E., Bureau of Ethnology, Washington, D. C. (50).
H
 *Jenks, Elisha T., Middleboro, Mass. (22). 1874. **D**
 Jenks, Wm. H., Brookville, Pa. (38).
 Jenks, William Johnson, Electrical Engineer, 120 Broadway,
 New York, N. Y. (50). **B D**
 Jenney, Walter Proctor, E. M., Ph. D., Consulting Geologist and
 Mining Engineer, Knutsford Hotel, Salt Lake City, Utah. (50).
E
 Jennings, Gainor, M. D., West Milton, Ohio. (51). **K**
 *Jennings, Walter L., Worcester Polytechnic Institute, Worcester,
 Mass. (45). 1898.
 Jepson, Wm., M. D., Sioux City, Ia. (51). **K**
 *Jesup, Prof. Henry G., Dartmouth College, Hanover, N. H. (36).
 1891. **F**
 Jesup, James R., 555 Fifth Ave., New York, N. Y. (50).
 *Jesup, Morris K., 44 Pine St., New York, N. Y. (29). 1891. **I**
 Jewell, Lewis E., Johns Hopkins University, Baltimore, Md. (49).
 *Jewett, Prof. Frank Fanning, Oberlin College, Oberlin, Ohio. (47).
 1899. **C**
 Jewett, Geo. Franklin, M. D., Forman, N. Dak. (51). **K**
 Johns, Carl, Instructor in Biology, Bethany College, Lindsborg,
 Kans. (50). **F**
 Johnson, Albert Lincoln, C. E., 606 Century Bldg., St. Louis,
 Mo. (51). **D**
 Johnson, Chas. Willison, Curator of Museum, Wagner Free
 Institute of Science, Philadelphia, Pa. (51).
 Johnson, Frank Edgar, 747 Warburton Ave., Yonkers, N. Y. (50).
 Johnson, Frank Seward, M. D., 2521 Prairie Ave., Chicago, Ill.
 (51). **K**
 Johnson, Miss Isabel Louise, 467 Mass. Ave., Station A, Boston,
 Mass. (47). **E**
 *Johnson, John B., Madison, Wis. (33). 1886. **D**
 Johnson, Nels, Manistee, Mich. (41). **A B**
 *Johnson, Otis C., 730 Thayer St., Ann Arbor, Mich. (34). 1886. **C**
 Johnson, William Stone, Room 140, State House, Boston, Mass.
 (47). **D**
 *Johnson, Willis Grant, 52 Lafayette Place, New York, N. Y. (47).
 1901. **F**

MEMBERS AND FELLOWS.

- Johnson, W. Smythe, Ph. D., Natchitoches, La. (49). **H**
- Johnston, Geo. Ben., M. D., 407 E. Grace St., Richmond, Va. (51).
K
- Johnston, Thomas J., 66 Broadway, New York, N. Y. (50). **A B D**
- Johnston, William A., Prince Bay, Borough of Richmond, N. Y. (50). **C**
- Johnstone, William Bard, Assistant in Physics, Columbia University, New York, N. Y. (50). **B**
- Johonnott, Edwin Sheldon, Ph. D., Rose Polytechnic Institute, Terre Haute, Ind. (50).
- Jones, Charles C., M. D., Galveston, Texas. (50). **K**
- Jones, Clement Ross, Professor Mechanical Engineering, West Virginia University, Morgantown, W. Va. (50). **D**
- *Jones, Frederick S., Professor of Physics, University of Minnesota, Minneapolis, Minn. (45). 1901. **B**
- *Jones, Lewis R., Burlington, Vt. (41). 1894. **G**
- Jones, Lynds, M. Sc., Instructor in Zoology, Oberlin College, Oberlin, Ohio. (50). **F**
- *Jones, Prof. Marcus E., Salt Lake City, Utah. (40). 1893. **G**
- Jones, Philip Mills, M. D., 1710A, Stockton St., San Francisco, Cal. (50).
- *Jordan, Prof. David Starr, President of Stanford University, Stanford University, Cal. (31). 1883. **F**
- *Jordan, Edwin Oakes, Ph. D., University of Chicago, Chicago, Ill. (50). 1901. **K**
- Jordan, Whitman H., Director N. Y. Agric. Exper. Station, Geneva, N. Y. (45).
- Juat, Francis, M. D., Aberdeen, N. C. (50). **F K**
- *Judd, Prof. Charles H., University of Cincinnati, Cincinnati, Ohio. (49). 1901. **H I**
- *Julien, Alexis A., N. Y. Academy of Sciences, New York, N. Y. (24). 1875. **C E**
- Just, John A., Chemist, 116 West Castle St., Syracuse, N. Y. (50). **C**
- Kahl, Paul Hugo Isidor, State Inspector of Nurseries and Orchards, 903 California St., Urbana, Ill. (50). **F**
- *Kahlenberg, Louis, Ph. D., 306 Lake St., Madison, Wis. (46). 1898. **C**
- Kahn, Julius, 100 West 80th St., New York, N. Y. (50). **C**
- Kammerer, Jacob Andrae, 87 Jameson Ave., Toronto, Canada. (50). **C D**
- Kaufmann, Paul, M. D., Professor of Bacteriology, Pathology, and Hygiene, State University, Columbia, Mo. (50). **K**
- Kay, James I., 426 Diamond St., Pittsburg, Pa. (51). **D I**
- Kay, Thomas Wiles, M. D., 345 Wyoming Ave., Scranton, Pa. (51). **K**

MEMBERS AND FELLOWS.

- Kean, Mrs. Hamilton Fish, 25 East 37th St., New York, N. Y. (50).
- Keane, John J., Rt. Rev., Archbishop of Dubuque, Dubuque, Ia. (51).
- Kearney, Thomas H., Jr., U. S. Dept. Agriculture, Washington, D. C. (47). **G**
- Keasbey, Lindley Miller, Professor of Economics and Politics, Bryn Mawr College, Bryn Mawr, Pa. (51). **H I**
- Kedzie, John H., 1514 Ridge Ave., Evanston, Ill. (34). **B**
- *Kedzie, Robert C., M. D., Professor of Chemistry, Agricultural College, Mich. (29). 1881. **C**
- Keene, Geo. Fredk., M. D., Supt. State Hospital for the Insane, Howard, R. I. (51). **K**
- *Keep, Wm. J., Detroit, Mich. (37). 1897.
- Keilholtz, Pierre Otis, Consulting Engineer, Continental Trust Building, Baltimore, Md. (50). **D**
- Keim, Edward Tudor, E. E., Supt. Am. Dist. Tel. Co., 1447 Lawrence St., Denver, Colo. (50). **D F**
- Keith, Prof. Marcia A., Mount Holyoke College, South Hadley, Mass. (46). **B**
- Keller, Edward, Ph. D., Box 724, Baltimore, Md. (50). **C D**
- Keller, Emil E., P. O. Box 452, Pittsburg, Pa. (51).
- *Kellerman, Prof. William A., Ohio State University, Columbus, Ohio. (41). 1893. **G**
- Kelley, John Harris, 315 N. Vine St., Nashville, Tenn. (44). **C**
- Kelley, Walter S., Mining Engineer, Leadville, Colo. (50). **D**
- Kellogg, John H., M. D., Battle Creek, Mich. (24). **F**
- *Kellogg, Vernon Lyman, Professor of Entomology, Stanford University, California. (50). 1901. **F**
- Kelly, John F., Ph. D., Consulting Electrical Engineer, 284 W. Housatonic St., Pittsfield, Mass. (50). **D**
- Kelly, William, Mining Engineer, General Manager Penn. Iron Mining Co., Vulcan, Mich. (50). **D E**
- Kelsey, Harlan Page, 1150 Tremont Building, Boston, Mass. (47). **G**
- Kelsey, James A., Agric. Exper. Station, New Brunswick, N. J. (49).
- *Kemp, James F., School of Mines, Columbia University, New York, N. Y. (36). 1888. **E**
- Kendall, Francis Drake, M. D., 1309 Plain St., Columbia, So. Carolina. (51). **K**
- Kendall, Hugh F., Mining Engineer, The Interstate Mining Co., Virginia, Minn. (50). **E**
- Kendig, Rev. A. B., D. D., 86 Vernon St., Brookline, Mass. (49).
- *Kendrick, Arthur, Electrical Measuring Instruments, 45 Hunnewell Ave. Newton, Mass. (45). 1897. **B**

MEMBERS AND FELLOWS.

- Kennedy, Frank Lowell, Instructor in Lawrence Scientific School, Harvard University, Cambridge, Mass. (50).
- Kennedy, Dr. George Golding, Readville, Mass. (40). **F G**
- KENNEDY, HARRIS, 284 Warren St., Roxbury, Mass. (40). **E F**
- *Kennelly, Arthur Edwin, Sc. D., Electrical Engineer, Crozer Building, Philadelphia, Pa. (50). 1901. **D**
- Kent, James Martin, Instructor in Steam and Electricity, Manual Training High School, Kansas City, Mo. (50). **D E**
- Kent, Norton Adams, Ph. D., Yerkes Observatory, Williams Bay, Wis. (50). **A**
- *Kent, William, Passaic, N. J. (26). 1881. **D I**
- Kenyon, Oscar Curtis, Teacher of Physics, High School, Syracuse, N. Y. (50). **B**
- Kepner, Harry V., Instructor in Chemistry, Manual Training High School, Denver, Colo. (50). **C**
- Keppel, F. P., Secretary of Columbia University, West 116th St., New York, N. Y. (51).
- Keppler, Rudolph, 28 W. 70th St., New York, N. Y. (49).
- Kern, Josiah Quincy, Ph. D., 507 6th St., N.W., Washington, D. C. (40). **I**
- Kern, Walter McCullough, Supt. Public Schools, Columbus, Neb. (50). **F G**
- *Kershner, Prof. Jefferson E., Lancaster, Pa. (29). 1883. **A B**
- Kesler, John Louis, Prof. of Natural Science, Baptist Female University, Raleigh, N. C. (51). **F**
- Kester, Fred. Edward, Ohio State University, Columbus, Ohio. (48). **B**
- Ketchum, Alexander P., 32 Mt. Morris Park, W., New York, N. Y. (49).
- *Keyser, Cassius Jackson, Instructor in Mathematics, Columbia University, New York, N. Y. (50). 1901. **A**
- Kimball, Albert B., M. E., Central High School, Springfield, Mass. (47). **B**
- *Kimball, Arthur Lalanne, Professor of Physics, Amherst College, Amherst, Mass. (50). 1901. **B**
- Kimball, Edwin Boyce, Mining Engineer, Oroville, Cal. (50). **D**
- Kimball, S. I., Life Saving Service, U. S. Treasury Dept., Washington, D. C. (49). **I**
- Kindle, Dr. Edward M., Geologist, 109 Elm St., New Haven, Conn. (50). **E**
- *Kinealy, John H., Washington University, St. Louis, Mo. (36). 1891. **D**
- *King, A. F. A., M. D., 1315 Mass. Ave., N.W., Washington, D. C. (29). 1900. **F H**
- King, Cyrus A., Ph. D., Instructor in Botany, University of Indiana, Bloomington, Ind. (50). **G**

MEMBERS AND FELLOWS.

- *King, F. H., 205 9th St., S.W., Washington, D. C. (32). 1892. **E F**
- King, George B., Lawrence, Mass. (47).
- *Kingsbury, Albert, Professor of Applied Mechanics, Worcester Polytechnic Institute, Worcester, Mass. (43). 1898. **D**
- *Kingsbury, Benj. F., Ithaca, N. Y. (45). 1899. **F**
- Kinner, Hugo, M. D., 1103 Rutger St., St. Louis, Mo. (21). **F H**
- Kinney, Charles Noyes, Professor of Chemistry, Drake University, Des Moines, Iowa. (50). **C**
- Kinney, Julius Eugene, M. D., 1427 Stout St., Denver, Colo. (51). **K**
- *Kinnicutt, Dr. Leonard P., 77 Elm St., Worcester, Mass. (28). 1883. **C**
- Kinraid, Thomas Burton, 38 Spring Park Avenue, Jamaica Plain, Mass. (47).
- Kinsley, Carl, Quadrangle Club, Chicago, Ill. (47). **B**
- Kirk, Arthur, 910 Duquesne Way, Pittsburg, Pa. (50). **E I**
- Kirk, Elliott W., Wesley Hall, Nashville, Tenn. (50). **F G**
- Kirkpatrick, E. A., Fitchburg, Mass. (49). **H I**
- Kirkpartick, Samuel, M. D., Selma, Ala. (51). **K**
- Kirkwood, Joseph E., Instructor in Botany, Syracuse University, Syracuse, N. Y. (51). **G**
- *Kirschmann, A., Ph. D., Toronto University, Toronto, Can. (50). 1901. **H K**
- Kittredge, Miss H. A., North Andover, Mass. (37). **F**
- Klebs, Arnold C., M. D., 706, 100 State St., Chicago, Ill. (51). **K**
- Klepetko, Frank, Manager Reduction Works of Anaconda Copper Mining Co., Butte, Mont. (50). **D**
- Klie, G. H., Chas. M. D., 5100 N. Broadway, St. Louis, Mo. (39). **C F**
- *Klotz, Otto Julius, 437 Albert St., Ottawa, Can. (38). 1889.
- Knapp, Alfred A., M. D., Brimfield, Peoria Co., Ill. (51). **K**
- Knapp, G. N., Stanton, Minn. (46). **G H**
- Knaufl, Francis Henry, Oak Lane, Philadelphia, Pa. (51). **D**
- Knerr, Ellsworth B., Sc. D., Midland College, Atchison, Kas. (51).
- Knight, Prof. Charles M., 219 S. Union St., Akron, Ohio. (29). **B C**
- Knight, Wm. H., President So. California Academy of Sciences, 2 Bryson Block, Los Angeles, Cal. (51). **A**
- *Knipp, Charles Tobias, Indiana University, Bloomington, Ind. (46). 1900. **B**
- Knowles, Morris, Resident Engineer, Bureau of Filtration, 5656 Callowhill St., Pittsburg, Pa. (51). **D**
- Knox, Francis H., Electrical Engineer, Spartanburg, S. C. (50). **D**
- Knox, Henry H., Mining Engineer, 110 East 23d St., New York, N. Y. (50). **D**
- Knox, S. L. Griswold, General Electric Co., Schenectady, N. Y. (50)

D

MEMBERS AND FELLOWS.

- *Kober, Geo. Martin, M. D., 1600 T St., N.W., Washington, D. C. (40). 1896. **H**
- Koenig, Adolph, M. D., Editor "Penna. Medical Journal," 122 Ninth St., Pittsburg, Pa. (50). **F G K**
- *Kofoid, Prof. Charles Atwood, University of California, Berkeley, Cal. (48). 1899. **F**
- Kohnke, Quitman, M. D., Chairman and Health Officer, Board of Health, Cora Building, New Orleans, La. (51). **K**
- Kolbenheyer, Fred'k, M. D., 2006 Lafayette Ave., St. Louis, Mo. (51). **K**
- Koues, Miss Elizabeth L., 282 W. 85th St., New York, N. Y. (41). **I**
- *KRAEMER, PROF. HENRY, 145 N. 10th St., Philadelphia, Pa. (47). 1901. **G**
- Kraus, Edward H., Syracuse University, Syracuse, N. Y. (50). **E**
- Krause, Otto H., Prospect Ave., Hackensack, N. J. (50).
- Krécsy, Prof. Béla, vi Bulyovsxky u. 22, Budapest, Hungary. (41). **C**
- *Kremers, Prof. Edward, University of Wisconsin, Madison, Wis. (47). 1901. **C**
- Kretz, Prof. Charles Henry, Asst. Professor Mechanical Engineering, La. State University and A. and M. College, Baton Rouge, La. (50). **D**
- *Kroeber, A. L., Ph. D., Univ. of California, Berkeley, Cal. (47). 1901. **H**
- Kuhne, F. W., 19 Court St., Fort Wayne, Ind. (38). **A F**
- Kummer, Frederic Arnold, Civil Engineer, President, United States Wood Preserving Co., 29 Broadway, New York, N. Y. (51). **D**
- Kunhardt, Wheaton B., 1 Broadway, New York, N. Y. (49).
- Kuntze, Dr. Otto, Villa Girola, San Remo, Italy. (49).
- *Kunz, G. F., care of Messrs. Tiffany & Co., Union Square, New York, N. Y. (29). 1883. **C E H**
- *Lachman, Arthur, Ph. D., Professor of Chemistry and Dean of College of Science and Engineering, University of Oregon, Eugene, Oregon. (50). 1901. **C D**
- *Ladd, Prof. E. F., Agricultural College, Fargo, No. Dakota. (36). 1889. **C**
- Ladd, George Tallman, care Bass Foundry and Machine Co., Fort Wayne, Ind. (51).
- La Fetra, Linnaeus Edford, M. D., 58 West 58th St., New York, N. Y. (50). **F H K**
- *Laflamme, Prof. J. C. K., Laval University, Quebec, Can. (29). 1887. **B E**
- *La Flesche, Francis, 214 First St., S.E., Washington, D. C. (33). 1885. **H**

MEMBERS AND FELLOWS.

*Lamb, Daniel S., M. D., 800 10th St., N.W., Washington, D. C. (40). 1894. **H**

*Lambert, Preston A., 215 S. Center St., Bethlehem, Pa. (41). 1896. **A**

Lampard, Henry, 102 Shuter St., Montreal, Can. (40). **C D E**

Lancaster, Walter B., M. D., 101 Newbury St., Boston, Mass. (51). **K**

Landes, Henry, State Geologist, Seattle, Wash. (51). **E**

Landis, W. W., Dickinson College, Carlisle, Pa. (50).

Landon, Francis C., Staatsburg-on-Hudson, N. Y. (50).

*Landreth, Olin H., Union College, Schenectady, N. Y. (28). 1883.

D

Lane, Alfred C., State Geologist, Lansing, Mich. (50). **E**

Lane, Horace Manley, M. D., Caixa 14 S. Paulo, Brazil, South America. (46).

Lang, Prof. Henry R., Yale University, New Haven, Conn. (41). **H**

Lange, J. D., 220 W. 79th St., New York, N. Y. (49).

Lange, Philip A., Supt. Westinghouse Elec. and Mfg. Co., Pittsburgh, Pa. (50). **D**

*Langenbeck, Karl, 27 Orchard St., Zanesville, Ohio. (39). 1896. **C**

*Langley, Prof. S. P., Smithsonian Institution, Washington, D. C. (18). 1874. **A B**

Langmann, Gustav, M. D., 121 W. 57th St., New York, N. Y. (36).

Langsdorf, Alexander Suss, Instructor in Physics and Electrical Engineering, Washington University, St. Louis, Mo. (50). **B D**

Lanneau, John Francis, Professor of Applied Mathematics and Astronomy, Wake Forest College, Wake Forest, N. C. (50).

A B D

Lamphear, Burton S., Asst. Professor of Electrical Engineering, Iowa State College, Ames, Ia. (51). **D**

*Lanza, Prof. Gaetano, Mass. Institute Technology, Boston, Mass. (29). 1882. **A B D**

Laramy, Robert Edward, Teacher in Moravian School, 27 North New St., Bethlehem, Pa. (51). **E**

Lare, H. S. P., M. D., 3452 Park Ave., St. Louis, Mo. (49).

La Rue, Wm. Gordon, North Freedom, Wis. (50). **D E**

Lathbury, B. Brentnall, C. E., Consulting Chemist, 1619 Filbert St., Philadelphia, Pa. (51). **D**

Latimer, Thos. S., M. D., 211 W. Monument St., Baltimore, Md. (50). **F H K**

*Lattimore, Prof. S. A., University of Rochester, Rochester, N. Y. (15). 1874. **C**

Lauder, George, 7403 Penn Avenue, Pittsburg, Pa. (50).

*Laudy, Louis H., Ph. D., School of Mines, Columbia University, New York, N. Y. (28). 1890. **C**

Lauman, George Nieman, Instructor in Horticulture, Cornell University, Ithaca, N. Y. (50). **G**

MEMBERS AND FELLOWS.

- Law, Benedict W., 693 Lafayette Ave., Brooklyn, N. Y. (45). **E**
- Lawrance, J. P. S., Past Assistant Engineer U. S. N., Navy Dept., Washington, D. C. (35). **D**
- Lawrence, A. E., 1 W. 81st St., New York, N. Y. (49).
- Lawrence, Harry E., Univ. of Rochester, Rochester, N. Y. (44). **B**
- Lawrence, James W., Professor of Mechanical Engineering, Agricultural College, Fort Collins, Colo. (50). **D**
- Laws, Frank Arthur, Mass. Institute Technology, Boston, Mass. (47).
- *Lawson, Andrew C., Professor of Geology and Mineralogy, University of California, Berkeley, Cal. (50). 1901. **E**
- Lay, Henry Champlin, Civil and Mining Engineer and Geologist, U. S. Deputy Mineral Surveyor, Telluride, Colo. (51). **D E**
- *Leach, Miss Mary F., 502 Forest Ave., Ann Arbor, Mich. (44). 1896. **C**
- *Leaming, Edward, 437 West 59th St., New York, N. Y. (50). 1901. **C**
- Leathers, W. S., Professor of Biology, University of Mississippi, University P. O., Miss. (50). **F**
- Leavitt, Frank M., Mechanical Engineer, 258 Broadway, New York, N. Y. (51). **D**
- Le Boutillier, Roberts, E. Washington Avenue, Germantown, Philadelphia, Pa. (47). **G**
- *Le Brun, Mrs. Michel M., 8 Mountain Ave., S., Montclair, N. J. (35). 1892. **F**
- Le Conte, Robert Grier, M. D., 1625 Spruce St., Philadelphia, Pa. (51). **K**
- Le Conte, Louis Julian, Civil Engineer, P. O. Box 482, Oakland, Cal. (51). **D**
- *Ledoux, Albert R., Ph. D., 99 John St., New York, N. Y. (26). 1881. **C**
- Lee, Francis Valentine T., Electrical Engineer, 31 and 33 New Montgomery St., San Francisco, Cal. (50). **D**
- *Lee, Frederic S., Adjunct Professor of Physiology, Columbia University, New York, N. Y. (49). 1901. **K**
- Lee, Waldemar, Passaic, N. J. (50).
- Lee, William George, Harvard Medical School, Boston, Mass. (50). **H K**
- Lee, Prof. Willis Thomas, Trinidad, Colo. (47). **E F**
- Leeds, Morris E., 3221 North 17th St., Philadelphia, Pa. (50). **D**
- *Lefavour, Prof. Henry, The Westminster, Boston, Mass. (42). 1894.
- Le Grand, Leroy, M. D., Graham, Texas. (50). **F K**
- *Lehmann, G. W., Ph. D., City Hall Annex, Baltimore, Md. (30). 1885. **B C**
- Lehnartz, W., 173 S. Union St., Grand Rapids, Mich. (51).

MEMBERS AND FELLOWS.

- Leidy, Joseph, Jr., M. D., 1319 Locust St., Philadelphia, Pa. (51). **K**
- Leisen, Theo. Alfred, Civil Engineer, Wilmington, Del. (51).
B C D G
- Leiter, L. Z., 81 South Clark St., Chicago, Ill (40).
- Lemley, C. McC., Asst. Engineer, B. & O. R.R. Co., Philippi, W. Va. (51). **D**
- Lemp, William J., cor. Cherokee St. and 2d Carondelet Avenue, St. Louis, Mo. (27).
- Lender, Mrs. Julia A., 2201 Lincoln Ave., Denver, Colo. (50). **A B**
- Lengfeld, Felix, Ph. D., Consulting and Manufacturing Chemist, 202 Stockton St., San Francisco, Cal. (51). **C**
- *Lennon, William H., Brockport, N. Y. (31). 1894. **C G**
- Leonard, Chas. Lester, M. D., 1930 Chestnut St., Philadelphia, Pa. (51). **K**
- Leonard, John William, Editor of "Who's Who in America," Wheaton, Ill. (50). **I**
- Leonard, Percy Allan, Editor of "Ores and Metals," P. O. Box 364, Denver, Colo. (50). **E**
- Le Rossignol, James Edward, Ph. D., Professor of Economics, University of Denver, University Park, Colo. (50). **I**
- *Lesley, Prof. J. Peter, P. O. Box 93, Milton, Mass. (2). 1874. **E**
- Leslie, Miss Augusta, Newburgh, N. Y. (50). **I**
- Letson, Miss Elizabeth J., 366 Mass. Ave., Buffalo, N. Y. (47).
- *Leverett, Frank, Ann Arbor, Mich. (37). 1891. **E**
- Levine, Edmund J., The Fiberloid Co., 638 Broadway, New York, N. Y. (49).
- LEWIS, CLARENCE MCKENZIE, care Chief Engineer, B. & O. R.R., Baltimore, Md. (47). **D**
- Lewis, George Smith, 746 State St., Springfield, Mass. (44). **G**
- Lewis, Howard W., Banker, 1928 Spruce St., Philadelphia, Pa. (51). **I**
- *Lewis, Joseph Volney, Professor of Geology, Clemson College, S. C. (45). 1900. **C E**
- Lewis, Wilfred, Pres. The Tabor Mfg. Co., 5901 Drexel Road, Philadelphia, Pa. (51). **D**
- *Libbey, Prof. William, Princeton, N. J. (29). 1887. **E F**
- Lichthardt, G., Jr., 18th and M Sts., Sacramento, Cal. (50).
- Lichty, Milton J., M. D., Cor. Genesee St. and Hough Ave., Cleveland, Ohio. (50). **F K**
- Lightfoot, Thos. Montgomery, Asst. Prof. of Physical Science, Central High School, Philadelphia, Pa. (51). **G**
- *Lillie, Frank R., Professor of Zoology, University of Chicago, Chicago, Ill. (50). 1901. **F**
- Lincoln, Paul Martyn, Electrical Engineer, care Niagara Falls Power Co., Niagara Falls, N. Y. (50). **D**

MEMBERS AND FELLOWS.

- *Lindenköhl, Adolphus, U. S. C. and G. Survey, Washington, D. C. (40). 1898. **E**
- Lindenköhl, Henry, U. S. C. and G. Survey, Washington, D. C. (47).
- *Lindenthal, Gustav., C. E., 45 Cedar St., New York, N. Y. (37). 1891. **I**
- Linder, Oliver A., 35 Clark St., Chicago, Ill. (49).
- Lindsay, Alexander M., Rochester, N. Y. (41).
- Lindsey, Edward, Warren, Pa. (48). **H**
- *Ling, Charles Joseph, Instructor in Physics, Manual Training High School, Denver, Colo. (50). 1901. **A B**
- *Linn, Alvin Frank, Ph. D., Professor of Chemistry, Wittenberg College, Springfield, Ohio. (50). 1901. **C**
- Linn, George A., M. D., Monogahela, Pa. (51). **K**
- Linville, Henry, R., 509 West 112th St., New York, N. Y. (49).
- Lion, Léon Elie, C. E., Assistant on U. S. Engineer Corps, 1010 Burgundy St., New Orleans, La. (51). **D**
- Littell, Frank B., U. S. Naval Observatory, Washington, D. C. (49).
- Little, C. A., Analyst at Lorain Steel Works, Box 517, Elyria, Ohio. (50). **D**
- Little, Henry P., Superintendent of Union Schools, Momence, Ill. (50). **B**
- Livermore, Mrs. M. A. C., 59 Brewster St., Cambridge, Mass. (29). **F**
- Lloyd, Andrew J., 310 Boylston St., Boston, Mass. (47). **B H**
- *Lloyd, Francis E., Teachers' College, Columbia University, New York, N. Y. (48). 1901. **G**
- *Lloyd, John Uri, Court and Plum Sts., Cincinnati, Ohio. (38). 1890. **C F**
- Lobenstine, William C., 245 Central Park, W., New York, N. Y. (49).
- Lockwood, Cornelius Wygant, Teacher of Science, Newburgh Academy, Newburgh, N. Y. (50). **B E**
- Lockwood, Edwin Hoyt, Asst. Prof. Mechanical Engineering, Yale University, New Haven, Conn. (50). **D**
- *Loeb, Morris, Ph. D., 118 W. 72d St., New York, N. Y. (36). 1889. **C**
- Loeb, Leo, M. D., Gratwick Research Laboratory, University of Buffalo, Buffalo, N. Y. (51). **K**
- *Loew, Dr. Oscar, Komaba, Tokyo, Japan. (49). 1900. **G**
- Loewy, Benno, 206 and 208 Broadway, New York, N. Y. (41).
- Logan, F. G., 2919 Prairie Ave., Chicago, Ill. (42). **H**
- LOGAN, WALTER S., 27 William St., New York, N. Y. (36).
- Lomb, Adolph, P. O. Drawer 1033, Rochester, N. Y. (41).
- Lomb, Henry, P. O. Drawer 1033, Rochester, N. Y. (41).

MEMBERS AND FELLOWS.

- Lomb, Henry C., P. O. Drawer 1033, Rochester, N. Y. (43).
- *Long, Prof. John H., 2421 Dearborn St., Chicago, Ill. (41). 1895. **C**
- Long, William Henry, Jr., Denton, Texas. (50).
- *Longden, A. C., Ph. D., Professor of Physics, Knox College, Galesburg, Ill. (49). 1901. **B**
- Loomis, Frederick B., Ph. D., Assistant in Zoology, Amherst College, Amherst, Mass. (50). **F**
- Lord, Benjamin, 34 W. 28th St., New York, N. Y. (36).
- *LOUBAT, LE DUC DE, 47 rue Dumont d'Urville, Paris, France. (46). 1897. **H**
- *Loud, Frank H., Colorado Springs, Colo. (29). 1890. **A B**
- Louderback, George Davis, Professor of Geology, Nevada State University, Reno, Nev. (50). **E**
- *Lough, J. E., New York University, Washington Square, New York, N. Y. (50). 1901. **I**
- *Loughridge, Dr. R. H., Univ. of California, Berkeley, Cal. (21). 1874. **C E**
- *Love, Edward G., 80 E. 55th St., New York, N. Y. (24). 1882. **C**
- Lovejoy, J. R., Genl. Elec. Co., Schenectady, N. Y. (50). **D**
- LOVELAND, HORACE HALL, M. D., Michigamme, Mich. (51). **K**
- Low, A. A., Columbia Heights, Brooklyn, N. Y. (43). **A**
- *Low, Seth, Mayor of City of New York, New York, N. Y. (29). 1890.
- Lowber, Rev. James William. Ph. D., 113 East 18th St., Austin, Texas. (50). **I**
- Lowell, Mrs. Charles Russell, 120 East 30th St., New York, N. Y. (49).
- *Lowell, Percival, 53 State St., Boston, Mass. (36). 1896. **A**
- Lowell, Russell C., 167 Ohio Ave., Providence, R. I. (51).
- Lucas, Anthony F., Mining Engineer, 1406 16th St. N.W., Washington, D. C. (50). **D E**
- Luckey, John Eddy, M. D., Vinton, Ia., (51). **I K**
- *Ludlow, Jacob Lott, C. E., 434 Summit St., Winston, N. C. (50). **B D**
- Luebker, Otto J. J., U. S. Dept. Agriculture, Washington, D. C. (50). **G**
- Lufkin, Albert, Newton, Iowa. (31). **D E**
- Loll, Richard S., Amherst, Mass. (43). **F H**
- Lund, James, 142 Hawthorne St., Malden, Mass. (45).
- Lundin, Carl A. R., care Messrs. Alvan Clark and Sons, Cambridgeport, Mass. (47). **A**
- Luquer, Lea McIlvane, Columbia University, New York, N. Y. (49).
- Luther, Miss Agnes Vinton, 917 Broad St., Newark, N. J. (47). **E**
- *Lyford, Edwin F., Springfield, Mass. (33). 1896. **B C H**
- Lyle, Benjamin F., M. D., 2302 W. Eighth St., Cincinnati, Ohio. (51). **K**

MEMBERS AND FELLOWS.

- *Lyle, Major David A., U. S. A., P. O. Box 1606, Philadelphia, Pa. (28). 1880. **D**
- LYMAN; BENJ. SMITH, 708 Locust St., Philadelphia, Pa. (15). **E**
- Lyman, Chester W., Assistant to President of International Paper Co., 30 Broad St., New York, N. Y. (50). **I**
- Lyman, Henry H., 74 McTavish St., Montreal, Can. (29). **E F**
- Lyman, James, Assist. Engineer, Genl. Elec. Co., 1047 Monadnock Bldg., Chicago, Ill. (50). **D**
- Lyons, Albert Brown, M. D., Consulting Chemist, 72 Brainard St., Detroit, Mich. (50). **C K**
- *Mabery, Prof. C. F., Case School of Applied Science, Cleveland, Ohio. (29). 1881. **C**
- McAlpin, C. W., 11 East 90th St., New York, N. Y. (50).
- McAllister, Henry, Jr., Attorney at law, 512 Mining Exchange Building, Colorado Springs, Colo. (51).
- McArthur, Lewis L., M. D., 100 State St., Chicago, Ill. (51). **K**
- Macbeth, George A., Trustee Carnegie Institute, Pittsburg, Pa. (50). **D H**
- McBride, Hon. George Wickliffe, U. S. Comm'r La. Purchase Exposition, P. O. Box 173, Washington, D. C. (51). **I**
- McBride, Jas. H., M. D., Pasadena, Cal. (51). **K**
- *Macbride, Thomas H., Iowa City, Iowa. (38). 1890. **G**
- McCalley, Henry, Chief Assist. State Geologist, University, Ala. (50). **E**
- McCartney, Dr. James H., Room 501 Granite Building, Rochester, N. Y. (41). **A B**
- *McCauley, C. A. H., Colonel and Deputy Quartermaster-General, U. S. A., Manila, P. I. (29). 1881.
- McClelland, James H., M. D., 5th and Wilkins Aves., Pittsburg, Pa. (50). **F K**
- *McClintock, Emory, Morristown, N. J. (43). 1895. **A**
- McCormick, Henry Dreer, M. D., Resident Physician, Branch Hospital for the Insane, Verona, N. J. (51). **K**
- McCoy, Lucinus S., Whitten, Hardin Co., Iowa. (50). **A**
- *McCreath, Andrew S., 223 Market St., Harrisburg, Pa. (33). 1889. **C E**
- McCune, M. Virginia, M. D., 506 West John St., Martinsburg, W. Va. (51). **K**
- *McCurdy, Charles W., Ph. D., Witherspoon Building, Philadelphia, Pa. (35). 1895. **E F**
- *MacCurdy, George Grant, Ph. D., 237 Church St., New Haven, Conn. (48). 1900. **H**
- McCurdy, Hansford M., Manual Training High School, Kansas City, Mo. (51). **F G**
- McDermott, Rev. P. A., Pittsburg College of the Holy Ghost, Bluff and Cooper Sts., Pittsburg, Pa. (51).

MEMBERS AND FELLOWS.

- Macdonald, Benjamin J., 296 Grand St., Newburgh, N. Y. (50). **I**
- McDonnell, Curtis C., Asst. Chemist Agric. Exper. Station, Clemson College, S. C. (51). **C**
- *McDonnell, Prof. Henry B., College Park, Md. (40). 1893. **C**
- *MacDougall, Daniel T., N. Y. Botanical Garden, Bronx Park, New York, N. Y. (44). 1897. **G**
- MacDougall, George R., 131 West 73d St., New York, N. Y. (49).
- *MacDougall, Robert, Ph. D., Sedgwick Park, University Heights, New York, N. Y. (49). 1901. **H K**
- McFadden, L. H., Westerville, Ohio. (32). **B C**
- McFadden, Thomas Gilbert, Lebanon Valley Coll., Annville, Pa. (48). **C**
- MacFarland, W. W., 22 William St., New York, N. Y. (49).
- *Macfarlane, A., Lehigh University, S. Bethlehem, Pa. (34). 1886. **A B**
- Macfarlane, James R., President Academy of Science and Art, Pittsburg, Pa. (50). **E**
- *Macfarlane, John M., Lansdowne, Pa. (41). 1899. **F G**
- McGahan, Chas. F., M. D., Aiken, S. C. (51). **K**
- *McGee, Dr. Anita Newcomb, 1901 Baltimore St., Washington, D. C. (37). 1892. **H**
- McGee, D. W., Farley, Iowa. (50). **E**
- McGee, Miss Emma R., Box 197, Farley, Iowa. (33). **H**
- McGee, John Bernard, M. D., 1405 Woodland Ave., Cleveland, Ohio. (51). **H K**
- *McGee, W J, Ph. D., Bureau Amer. Ethnology, Washington, D. C. (27). 1882. **E H**
- *McGill, John T., Ph. D., Vanderbilt University, Nashville, Tenn. (36). 1888. **C**
- McGinnis, W. H., 1020 Orange St., Youngstown, Ohio. (48).
- *McGregory, Prof. J. F., Colgate University, Hamilton, N. Y. (35). 1892. **C**
- McGuire, Joseph D., 1908 Sunderland Place, Washington, D. C. (51).
- MacIntyre, Miss Lucy, 303 West 74th St., New York, N. Y. (49).
- Mack, Jacob W., 92 Liberty St., New York, N. Y. (49).
- McKee, George C., care The Wm. Tod Co., Youngstown, Ohio. (48). **A B D**
- McKelvy, William H., M. D., President Board of Education, 420 6th Ave., Pittsburg, Pa. (50). **I**
- McKenney, Randolph Evans Bender, Ph. D., Department of Agriculture, Washington, D. C. (51). **G**
- McKeown, W. W., Jr., Mining Engineer, Room 607, No. 160 Washington St., Chicago, Ill. (51). **D E**
- McKinney, Thomas Emery, Professor of Mathematics and Astronomy, Marietta College, Marietta, Ohio. (50). **A**

MEMBERS AND FELLOWS.

- McLain, Louis Randolph, Pres. of Florida Engineering Co., St. Augustine, Fla. (51). **D**
- McLanahan, George William, 1601 21st St. N.W., Washington, D. C. (50).
- MacLaren, Archibald, M. D., Lowny Bldg., 350 St. Peter St., St. Paul, Minn. (51). **K**
- McLaughlin, George Eyerma, M. D., 41 Crescent Ave., Jersey City, N. J. (47). **F H**
- McLaury, Howard L., Prof. of Mathematics and Physics, So. Dakota School of Mines, Rapid City, So. Dak. (50). **A B**
- McLean, Simon James, Ph. D., Professor of Economics and Sociology, University of Arkansas, Fayetteville, Ark. (51). **I**
- McLimont, Andrew Wingate, Electrical Engineer, Linares, Nuevo Leon, Mexico. (51). **D**
- *Macloskie, Prof. George, Princeton Univ., Princeton, N. J. (25). 1882. **F G**
- McMahan, Charles Hays, E. M., Supt. Sombrerete Mining Co., Sombrerete, Zacatecas, Mexico. (50). **E**
- *McMahon, Prof. James, Cornell University, Ithaca, N. Y. (36). 1891. **A**
- McMILLAN, SMITH B., Signal, Ohio. (37).
- McMILLIN, EMERSON, 40 Wall St., New York, N. Y. (37).
- *McMurtrie, William, 100 William St., New York, N. Y. (22). 1874. **C**
- McNeil, Hiram Colver, Teacher of Chemistry and Physics, Shurtleff College, Upper Alton, Ill. (51). **B C**
- *McNeill, Malcolm, Professor Mathematics and Astronomy, Lake Forest University, Lake Forest, Ill. (32). 1885. **A**
- MacNeille, Perry Robinson, 155 William St., Orange, N. J. (51).
- McNulty, Geo. Washington, Civil Engineer, 258 Broadway, New York, N. Y. (51). **D**
- McNulty, John J., Ph. D., College of City of New York, New York, N. Y. (50).
- *MacNutt, Barry, Lehigh University, So. Bethlehem, Pa. (47). 1900. **B**
- *McPherson, Prof. Wm., Ohio State Univ., Columbus, Ohio. (45). 1898. **C**
- McPherson, William D., 58 Hartford St., So. Framingham, Mass. (47).
- McQueeney, Francis J., M. D., 46 Dartmouth St., Boston, Mass. (51). **K**
- Macy, V. Everit, 68 Broad St., New York, N. Y. (49).
- Magee, Jas. Francis, 114 N. 17th St., Philadelphia, Pa. (51). **C**
- Magee, Louis J., Electrical Engineer, Grosse Quer Allee 1, Berlin Germany. (50). **B D**
- *Magie, Prof. Wm. Francis, Princeton University, Princeton, N. J. (35). 1887.

- Magnusson, Carl Edward, Ph. D., Prof. of Physics, University of New Mexico, Albuquerque, N. M. (51). **D**
- Magruder, Egbert W., Chemist, Department of Agriculture, Richmond, Va. (51). **C**
- *Magruder, Wm. T., Ohio State Univ., Columbus, Ohio. (37). 1899.
- Mahin, John William, Teacher in Manual Training High School, Denver, Colo. (50). **B C E**
- Mahoney, Stephen R., M. D., 206 Maple St., Holyoke, Mass. (51). **K**
- Makuen, G. Hudson, M. D., 1419 Walnut St., Philadelphia, Pa. (51). **K**
- Mallinckrodt, Edw., P. O. Sub-Station A, St. Louis, Mo. (29). **C**
- Mally, Charles William, Dept. Agric., Cape Town, So. Africa. (46).
- Mally, Fred'k William, Prof. of Entomology, Agric. and Mech. College, College Station, Tex. (50). **F G**
- Malm, John Lawrence, Marysville, Mont. (50). **C E**
- *Maltby, Margaret E., Ph. D., Barnard College, New York, N. Y. (46). 1898.
- Mangan, Daniel C., M. D., 95 Park Ave., Brooklyn, N. Y. (50). **F K**
- Manley, Thomas Henry, M. D., 115 West 49th St., New York, N. Y. (51). **K**
- Mann, Albert, Ph. D., 506 Westcott St., Syracuse, N. Y. (43). **G**
- *MANN, B. PICKMAN, 1918 Sunderland Place, Washington, D. C. (22). 1874. **F I**
- Mann, Thomas Wm., 35 Hampden St., Holyoke, Mass. (44). **D**
- Manning, Charles H., U. S. N., Manchester, N. H. (35). **D**
- Manning, J. Woodward, 1150 Tremont Building, Boston, Mass. (47). **G**
- Manning, Warren H., Brookline, Mass. (31). **E F H**
- Mansfield, Albert K., 125 Lincoln Ave., Salem, Ohio. (51). **D**
- Manson, Marsden, Comm'r of Public Works, 2010 Gough St., San Francisco, Cal. (51). **D**
- Mapes, Charles Victor, 60 W. 40th St., New York, N. Y. (37). **C**
- Marble, J. Russel, Worcester, Mass. (31). **C E**
- MARBLE, MANTON, Bedford, N. Y. (36).
- Marble, Milton M., Instructor in Physics, Hillhouse High School, New Haven, Conn. (50). **B**
- Marble, Miss Sarah, Woonsocket, R. I. (29). **C**
- Marc, Theophilus M., 359 Produce Exchange, New York, N. Y. (49).
- *Marindin, Henry Louis, U. S. C. and G. Survey, Washington, D. C. (40). 1898. **E**
- *Mark, Prof. E. H., Superintendent of Public Schools, Center and Walnut Sts., Louisville, Ky. (39). 1893. **B**
- *Mark, Edward Laurens, Director Zoological Laboratory, Harvard University, Cambridge, Mass. (50). 1901. **F**

MEMBERS AND FELLOWS.

- Markham, George Dickson, 4961 Berlin Ave., St. Louis, Mo. (50).
 Marks, Louis B., 687 Broadway, New York, N. Y. (50).
 Marks, William Dennis, C. E., The Art Club, Philadelphia, Pa. (50). **I**
 Marlatt, Miss Abby L., Manual Training High School, Providence, R. I. (48).
 *Marlatt, Charles L., U. S. Department Agriculture, Washington, D. C. (40). 1895. **F**
 Marlow, Frank William, M. D., 200 Highland St., Syracuse, N. Y. (50). **F H I K**
 Marple, Charles A., 743 Third Ave., Louisville, Ky. (39). **B**
 Marsden, Samuel, 1015 N. Leffengwell Ave., St. Louis, Mo. (27). **A D.**
 *Marsh, C. Dwight, Ripon, Wis. (34). 1893. **E F**
 Marsh, James P., M. D., 1828 5th Ave., Troy, N. Y. (51). **K**
 Marshall, Clara, M. D., 1712 Locust St., Philadelphia, Pa. (51). **K**
 Marshall, Horace Miller, U. S. Engineer Office, Vicksburg, Miss. (51). **D**
 Marsters, Vernon, Indiana University, Bloomington, Ind. (49).
 Marston, Edwin S., 291 Clinton Ave., Brooklyn, N. Y. (50).
 *Martin, Artemas, Ph. D., LL.D., U. S. Coast and Geodetic Survey, Washington, D. C. (38). 1890. **A**
 *Martin, Daniel S., 126 Macon St., Brooklyn, N. Y. (23). 1879. **E F**
 Martin, F. W., Ph. D., Analytical and Consulting Chemist, Lynchburg, Va. (49). **C**
 Martin, William Lyon, Augusta, Ga. (50). **H**
 *Marvin, C. F., U. S. Weather Bureau, Washington, D. C. (39). 1892. **B**
 *Marvin, Frank O., Dean School of Engineering, University of Kansas, Lawrence, Kan. (35). 1894. **D**
 Marvin, Harry Norton, 841 Broadway, New York, N. Y. (50). **D**
 Marvin, Joseph B., M. D., LL.D., President Kentucky University, Louisville, Ky. (51). **I**
 Marvin, Walter T., 36 Knox St., Cleveland, Ohio. (50). **H I**
 Mason, Amos Lawrence, M. D., Physician to Boston City Hospital, 265 Clarendon St., Boston, Mass. (50). **K**
 Mason, Lewis D., M. D., 171 Joralemon St., Brooklyn, N. Y. (51). **K**
 Mason, Miss Nellie M., Teacher of Science, Abbot Academy, Andover, Mass. (50). **B C**
 *Mason, Otis T., U. S. National Museum, Washington, D. C. (25). 1877. **H**
 *Mason, Dr. William P., Rensselaer Polytechnic Inst., Troy, N. Y. (31). 1886. **C**
 Massey, Wilbur Fisk, Botanist and Horticulturist, Agricultural Exper. Station, Raleigh, N. C. (51). **G**

MEMBERS AND FELLOWS.

- Matas, Rudolph, M. D., Professor of Surgery, Tulane University, New Orleans, La. (50). **H K**
- Mateer, Horace N., M. D., Wooster, Ohio. (36). **E F**
- Mathews, John A., Ph. D., Analyst and Consulting Chemist, Columbia University, New York, N. Y. (50). **C E**
- Mathews, Miss Mary Elizabeth, Foster Hall, University of Chicago, Chicago, Ill. (41). **F**
- Matlack, Charles, "Hidden Hearth," Matunuck, R. I. (27). **I**
- Matlack, Ellwood V., Sec'y and Mgr. Laclede Power Co., St. Louis, Mo. (50). **D**
- Matthews, Albert, 145 Beacon St., Boston, Mass. (51). **H**
- Matthews, Rodolph, D. D. S., 128 N. Main St., Wichita, Kansas. (50). **C F**
- *Matthews, Dr. Washington, 1262 N. H. Ave., Washington, D. C. (37). 1888. **H**
- Mattison, Fitch, C. E., M. D., Stowell Building, Pasadena, Cal. (51). **K**
- Mattoon, A. M., Scott Observatory of Park College, Parkville, Mo. (47). **A**
- Maxon, William R., U. S. National Museum, Washington, D. C. (49).
- Maxwell, Fred. Baldwin, Ph. D., 308 Franklin Ave., River Forest, Oak Park P. O., Ill. (51). **F**
- Maxwell, George H., Chairman Executive Committee, National Irrigation Association, 1827 Phelps Place, Washington, D. C. (50). **E**
- Maxwell, Hu., Treasurer Transallegheny Historical Society, Morgantown, W. Va. (50). **E**
- *Mayer, Alfred Goldsborough, S. D., M. E., Museum Brooklyn Institute, Eastern Parkway, Brooklyn, N. Y. (47). 1900. **F**
- Maynard, George C., 1407 15th St., Washington, D. C. (35). **B D**
- Maynard, Washburn, Captain U. S. N., Light House Board, Treasury Department, Washington, D. C. (33). **B**
- Mead, Elwood, Consulting Civil Engineer, Washington, D. C. (51). **D**
- Means, James, 196 Beacon St., Boston, Mass. (47).
- *Mearns, Dr. Edgar A., U. S. A., Fort Adams, Newport, R. I. (49). 1901. **K**
- Medsger, Oliver P., Jacob's Creek, Pa. (50). **G**
- Meehan, S. Mendelson, Germantown, Philadelphia, Pa. (51). **G**
- *Mees, Prof. Carl Leo, Rose Polytechnic Institute, Terre Haute, Ind. (24). 1876. **B C**
- *Mell, P. H., Prof. of Geology and Botany, Polytechnic Institute, Auburn, Ala. (39). 1895. **E G**
- Mellen, Edwin D., Manufacturer, 1590 Massachusetts Ave., Cambridge, Mass. (51). **D**

MEMBERS AND FELLOWS.

- Mellor, Alfred, President of the Mellor and Rittenhouse Co.,
2130 Mt. Vernon St., Philadelphia, Pa. (51).
- Mellor, Charles C., 319 Fifth Ave., Pittsburg, Pa. (38).
- *Meltzer, S. J., M. D., 166 West 126th St., New York, N. Y. (49).
1901. **K**
- *Mendenhall, Charles E., Ph. D., University of Wisconsin, Madison,
Wis. (48). 1900. **B**
- *Mendenhall, T. C., Worcester, Mass. (20). 1874. **B**
- Menninger, Charles Frederic, M. D., 1251 Topeka Ave., Topeka,
Kan. (50). **F G K**
- *Mercer, H. C., Doylestown, Pa. (41). 1893. **H**
- Mercer, William Fairfield, Ph. D., Professor of Biology, Ohio
University, Athens, Ohio. (50). **F**
- *Merriam, Dr. C. Hart, U. S. Department Agriculture, Washington,
D. C. (49). 1900. **F**
- Merrill, Earle Abbott, 26 Cortlandt St., New York, N. Y. (50). **D**
- Merrill, Elmer Drew., U. S. Dept. Agriculture, Washington, D. C.
(50). **G**
- *MERRILL, FREDERICK J. H., Ph. D., New York State Museum,
Albany, N. Y. (35). 1887. **E**
- Merrill, Joseph Francis, Ph. D., Professor of Physics and Elec-
trical Engineering, University of Utah, Salt Lake City, Utah.
(50). **B D**
- Merrill, Lucius Herbert, Professor of Biological Chemistry, Uni-
versity of Maine, Orono, Maine. (50). **C**
- Merrill, Payson, 111 Broadway, New York, N. Y. (50).
- MERRILL, MRS. WINIFRED EDGERTON, Ph. D., 268 State St.,
Albany, N. Y. (55). **A**
- *Merriman, C. C., 1910 Surf St., Lake View, Chicago, Ill. (29). 1880.
F
- *Merriman, Mansfield, Lehigh University, So. Bethlehem, Pa. (32).
1885. **A D I**
- *Merritt, Ernest, Cornell University, Ithaca, N. Y. (33). 1890. **B**
- Merrow, Miss Harriet L., Rhode Island College of Agriculture
and Mechanic Arts, Kingston, R. I. (44).
- Merryweather, George N., 639 Forest Ave., Avondale, Cin-
cinnati, Ohio. (30). **F H**
- Mershon, Ralph D., Consulting Enigneer, 621 Broadway, New
York, N. Y. (50). **D**
- *Metcalf, Maynard M., Ph. D., Professor of Biology, The Wo-
man's College, Baltimore, Md. (50). 1901. **F**
- METCALF, ORLANDO, 424 Telephone Building, Pittsburg, Pa. (35).
D
- *Metcalf, William, Pittsburg, Pa. (33). 1894. **D**
- Metcalf, Wilmot V., Professor of Chemistry and Physics, Carleton
College, Northfield, Minn. (50). **B C**

MEMBERS AND FELLOWS.

- Metcalfe, Captain Henry, 143 Liberty St., New York, N. Y. (50).
- *Metzler, William H., Ph. D., Syracuse University, Syracuse, N. Y. (45). 1899. **A**
- Meyer, John Franklin, Professor of Physics and Chemistry in Lower Merion High School, Ardmore, Pa. (51). **B**
- *Meyer, Max, Ph. D., Professor of Psychology, University of Missouri, Columbia, Mo. (49). 1901. **H I**
- *Mezes, Sidney Edward, Professor of Philosophy, University of Texas, Austin, Texas. (50). 1901. **I**
- *Michael, Mrs. Helen Abbott, 35 West Cedar St., Boston, Mass. (33) 1885. **C F**
- *Michelson, Prof. A. A., Chicago University, Chicago, Ill. (26). 1879. **B**
- Miles, Mrs. Cornelia, Principal of Broadway School, 1544 Franklin St., Denver, Colo. (50). **G**
- Miles, Francis T., M. D., 514 Cathedral St., Baltimore, Md. (50). **F K**
- Milham, Willis I., Williams College, Williamstown, Mass. (47). **A B**
- Millar, John M., Escanaba, Mich. (50).
- Millard, Charles Sterling, Engineer Maintenance of Way, P. & P. U. Ry., Peoria, Ill. (51). **D**
- Miller, Armand R., Professor of Chemistry, Manual Training High School, Kansas City, Mo. (50). **C**
- *Miller, Prof. Arthur M., State College, Lexington, Ky. (45). 1898. **E**
- Miller, Benjamin LeRoy, Johns Hopkins Univ., Baltimore, Md. (50). **E**
- *Miller, Prof. Dayton C., Case School of Applied Science, Cleveland, Ohio. (44). 1898. **B**
- MILLER, EDGAR G., 213 E. German St., Baltimore, Md. (29). **A E F**
- *Miller, Edmund H., Ph. D., Columbia University, New York, N. Y. (50). 1901. **C**
- *Miller, Ephraim, Professor of Mathematics and Astronomy, State University, Lawrence, Kan. (50). 1901. **A**
- Miller, Prof. Frank E., Otterbein University, Westerville, Ohio. (44). **A**
- Miller, Fred. J., Editor of "American Machinist," 34 Beech St., E. Orange, N. J. (51). **D**
- *Miller, George A., Ph. D., Stanford University, Cal. (46). 1898. **A**
- Miller, George N., M. D., 811 Madison Ave., New York, N. Y. (50). **K**
- Miller, Gerrit S., U. S. Natl. Museum, Washington, D. C. (51). **F**
- Miller, Henry Huntington, Mining and Metallurgical Engineer and Chemist, San Nicholas del Oro, Estado de Guerrero, Mex. (50). **C D E**
- Miller, Herbert Stanley, Electrical Engineer, 1025 East Jersey St., Elizabeth, N. J. (50). **D**

MEMBERS AND FELLOWS.

- Miller, Horace George, M. D., 189 Bowen St., Providence, R. I. (51). **K**
- Miller, James Shannon, Professor of Mathematics, Emory and Henry College, Emory, Va. (51). **A B**
- Miller, John A., 2500 Park Ave., Cairo, Ill. (22). **D**
- Miller, John Craig, M. D., Professor of Natural Science, Lincoln University, Pa. (50). **B C F K**
- Miller, Miss Louise Klein, School of Practical Agriculture, Briarcliff Manor, N. Y. (50). **I**
- Miller, P. Schuyler, Mt. Prospect Laboratory, Flatbush Ave., Brooklyn, N. Y. (46). **C**
- Miller, Pleasant T., 816 No. 9th St., Temple, Texas. (50).
- *Miller, Prof. William S., University of Wisconsin, Madison, Wis. (42). 1894. **F**
- Millis, John, Major of Engineers, U. S. A., U. S. Engineer's Office, Seattle, Wash. (48). **A B D E**
- *Mills, Prof. James, Ontario Agricultural College, Guelph, Ontario, Can. (31). 1895. **C I**
- Mills, Samuel C., Newburgh, N. Y. (50). **I**
- *Mills, Prof. Wesley, McGill University, Montreal, Can. (31). 1886. **F H**
- Mills, William C., Orton Hall, Ohio State University, Columbus, Ohio. (48).
- Milne, David, 2030 Walnut St., Philadelphia, Pa. (51).
- Minns, Miss S., 14 Louisburg Square, Boston, Mass. (32).
- *MINOT, CHARLES SEDGWICK, M. D., Harvard Medical School, Boston, Mass. (28). 1880. **F**
- Mitchell, Andrew S., Analytical and Consulting Chemist, State Analyst, 220 Greenbush St., Milwaukee Wis. (51). **C**
- Mitchell, Edward, 44 Wall St., New York, N. Y. (50).
- Mitchell, Henry Bedinger, Tutor in Mathematics, Columbia University, New York, N. Y. (50). **A**
- Mitchell, James, Newburgh, N. Y. (50). **A**
- Mitchell, Roland G., 141 Water St., New York, N. Y. (50).
- Mitchell, William Francis, M. D., Lancaster, Mo. (51). **K**
- Mixer, Chas. Adam, Civil Engineer, Resident Engineer, Rumford Falls Power Co., Rumford Falls, Maine. (51). **D**
- Mixer, Fred. K., 427 Delaware Ave., Buffalo, N. Y. (35). **E**
- Moenkhaus, Wm. J., Bloomington, Ind. (51).
- Mohler, John F., 127 S. College St., Carlisle, Pa. (44). **B**
- Mohr, Charles, M. D., Professor of Materia Medica and Therapeutics, Hahnemann Medical College and Hospital, Philadelphia, Pa. (51). **K**
- Mohr, Louis, M. E., 32 Illinois St., Chicago, Ill. (50). **A D**
- *Moler, Geo. S., 106 University Ave., Ithaca, N. Y. (38). 1892.
- MOLERA, E. J., Civil Engineer, 606 Clay St., San Francisco, Cal. (50). **D**

MEMBERS AND FELLOWS.

- Molitor, David, Civil and Consulting Engineer, 125 Park Ave.,
Fond du Lac, Wis. (51). **C D**
- Molitor, Frederic Albert, Little Rock, Ark. (51). **D**
- Momsen, Hart, Chief Clerk, Div. of Agric. Census Office, Washing-
ton, D. C. (50). **I**
- Monfort, Wilson F., Marietta College, Marietta, Ohio. (48). **C**
- Monroe, Joseph E., Professor of Physics and Chemistry, Montana
State Normal School, Dillon, Mont. (50). **B C**
- *Monroe, Will S., State Normal School, Westfield, Mass. (49).
1901. **H**
- Montgomery, Edmund, M. D., Hemstead, Texas. (50). **F K**
- Montgomery, Edmund B., M. D., 134 North 8th St., Quincy, Ill.
(51). **K**
- Montgomery, James H., Meadville, Pa. (50).
- Moody, Lucius W., New Haven, Conn. (43). **H**
- Moody, Mrs. Mary B., M. D., Fair Haven Heights, New Haven,
Conn. (25). **E F**
- *Moody, Robert O., M. D., Hearst Anatomical Laboratory, San
Francisco, Cal. (35). 1892. **F**
- Moody, William Albion, Professor of Mathematics, Bowdoin
College, Brunswick, Maine. (50). **A**
- Moore, Mrs. A. H., Sawyerville, P. Q., Canada. (32). **H**
- *Moore, Burton E., University of Nebraska, Lincoln, Neb. (41).
1899. **B**
- Moore, Charles James, E. M., P. O. Box 548, Cripple Creek,
Colo. (50). **D E**
- *Moore, Clarence B., 1321 Locust St., Philadelphia, Pa. (44). 1897.
H
- Moore, Ernest Carroll, Ph. D., Instructor in Philosophy, Uni-
versity of California, Berkeley, Cal. (50). **I**
- Moore, Geo. D., Ph. D., 201 Salsbury St., Worcester, Mass. (40).
- *Moore, George Thomas, U. S. Dept. Agriculture, Washington,
D. C. (49). 1901. **G**
- *Moore, J. W., M. D., Lafayette College, Easton, Pa. (22). 1874.
A B D
- Moore, Philip North, Geologist and Mining Engineer, 121 Laclede
Bldg., St. Louis, Mo. (50). **E**
- Moore, Robert, Civil Engineer, 61 Vandeventer Place, St. Louis,
Mo. (51). **D**
- Moore, Stanley H., Manual Training High School, Kansas City,
Mo. (50). **A D**
- *Moore, Willis L., Chief of the Weather Bureau, U. S. Dept. Agri-
culture, Washington, D. C. (44). 1897. **B**
- *Moorehead, Warren K., Curator of Museum, Phillips Academy,
Andover, Mass. (38). 1890. **H**

MEMBERS AND FELLOWS.

- Morgan, H. A., Professor of Zoology and Entomology, State University, Baton Rouge, La. (50). **F**
- Morgan, Wm. F., Short Hills, N. J., (27).
- *Morison, George Shattuck, C. E., 49 Wall St., New York, N. Y. (50). 1901. **D**
- *Morley, Prof. Edward W., Adelbert College, Cleveland, Ohio. (18). 1876. **B C E**
- Morrey, Charles B., Ohio State University, Columbus, Ohio. (48). **F**
- Morris, F. W., Villa Nova, Pa. (51):
- Morris, Henry L., 16 Exchange Place, New York, N. Y. (49).
- Morris, Newbold, 52 E. 72d St., New York, N. Y. (49).
- Morris, Russell Love, Professor of Civil and Mining Engineering, West Virginia State University, Morgantown, W. Va. (50). **D**
- Morrison, Gilbert B., 2510 Perry Ave., Kansas City, Mo. (48). **B C I**
- Morrison, Thomas, Manager, Edgar Thomson Steel Works, Braddock, Pa. (51). **D**
- Morse, Albert P., Wellesley, Mass. (50). **F**
- *Morse, E. S., Salem, Mass. (18). 1874. **F H**
- Morse, Fred. W., Prof. of Organic Chemistry, New Hampshire College, Durham, N. H. (51). **C**
- Morse, Max W., Biological Hall, Ohio State University, Columbus, Ohio. (51). **F**
- Morse, Willard S., Apartado "A," Aguascalientes, Mexico, (50). **C D E**
- Mortensen, Casper, Box 27, Schenectady, N. Y. (51).
- Morton, James F., Andover, N. H. (50).
- Moseley, Edwin L., High School, Sandusky, Ohio. (34).
- *Moser, Jefferson F., Commander U. S. N., Commanding U. S. S. "Pensacola," Station D, San Francisco, Cal. (28). 1889. **E**
- Moses, Prof. Alfred J., Columbia University, New York, N. Y. (49).
- *Moses, Dr. Thomas F., Worcester Lane, Waltham, Mass. (25). 1883. **F H**
- Mosman, Alonzo T., U. S. Coast and Geodetic Survey, Washington, D. C. (51). **D**
- *Mottier, David M., Ph. D., Professor of Botany, University of Indiana, Bloomington, Ind. (50). 1901. **F G K**
- Motter, Murray Galt, M. D., Medical School, Georgetown University, Washington, D. C. (51). **K**
- *Moulton, Forest Ray, Ph. D., Instructor in Celestial Mechanics, University of Chicago, Chicago, Ill. (50). 1901. **A**
- Mount, William D., M. E., General Superintendent, Mathieson Alkali Works, Saltville, Va. (51). **D**
- Mowry, Wm. A., 17 Riverside Square, Hyde Park, Mass. (29). **I**
- Moyer, Harold N., M. D., 103 State St., Chicago, Ill. (51). **K**

MEMBERS AND FELLOWS.

- Moyer, Lycurgus R., C. E., Montevideo, Minn. (50). **D G**
- Muir, John J., Manager, Natl. Steel Casting Co., 345 W. Wayne St., Fort Wayne, Ind. (51). **D**
- *Muir, John, Martinez, Cal. (22). 1900. **G**
- Mulford, Miss A. Isabel, Missouri Botanical Garden, St. Louis, Mo. (45). **G**
- *Mulliken, Samuel P., Mass. Inst. Technology, Boston, Mass. (43). 1899.
- Muncaster, Stewart Brown, M. D., 907 Sixteenth St. N.W., Washington, D. C. (51). **K**
- Munro, John Cummings, M. D., Instructor in Surgery, Harvard Medical School, Boston, Mass. (50). **F K**
- *MUNROE, PROF. C. E., Columbian University, Washington, D. C. (22). 1874. **C**
- Munson, T. V., Nurseryman, Denison, Texas. (51). **G**
- *Munson, Welton M., Prof. of Horticulture, The University of Maine, Orono, Me. (41). 1899. **F G**
- *Munsterberg, Hugo, Harvard University, Cambridge, Mass. (47). 1898.
- *Murdoch, John, Public Library, Boston, Mass. (29). 1886. **F H**
- Murdock, George J., Mechanician and Inventor, 248 Sixth Ave., Newark, N. J. (50). **A D**
- Murray, Charles R., 5636 Washington Ave., Chicago, Ill. (47). **D**
- *Murray, Daniel A., Ph. D., Dalhousie College, Halifax, N. S. (47). 1899. **A**
- Murray, Robert Drake, M. D., Surgeon Marine Hospital Service, Key West, Fla. (50). **K**
- Myer, Mrs. Mary H., 44 Mt. Vernon St., Boston, Mass. (44).
- Myers, Edward W., North Carolina Geological Survey, Chapel Hill, N. C. (49).
- *Myers, Prof. Geo. W., 6026 Monroe Ave., Chicago, Ill. (46). 1899. **A**
- *Myers, William S., M. Sc., F. C. S., Director Nitrate of Soda Propaganda, 12 John St., New York, N. Y. (43). 1898. **C**
- Myres, John L., M. A., F. S. A., Christ Church, Oxford, England. (46). **H**
- *Nagle, Prof. James C., A. and M. College, College Station, Texas. (40). 1893. **B D**
- Nash, Geo. V., Norwood Heights, Williamsbridge, New York, N. Y. (47).
- *Nason, Frank L., West Haven, Conn. (36). 1888. **E**
- *Needham, James G., Lake Forest College, Lake Forest, Ill. (45). 1898. **F**
- *Nef, J. U., University of Chicago, Chicago, Ill. (39). 1891. **C**
- Neff, Isaac E., Principal of High School, Kankakee, Ill. (51).
- Negley, Henry Hillis, 600 N. Negley Ave., Pittsburg, Pa. (50). **G**

MEMBERS AND FELLOWS.

- Neiler, Samuel Graham, Consulting and Designing Engineer,
1409 Manhattan Bldg., Chicago, Ill. (50). **D**
- Neilson, John, Larchmont, N. Y. (50).
- Neilson, Walter^e Hopper, M. D., Milwaukee, Wis. (51). **K**
- Nelson, Aven, Professor of Biology, University of Wyoming,
Laramie, Wyoming. (50). **F**
- *Nelson, Prof. A. B., Centre College, Danville, Ky. (30). 1882.
A B D
- Nelson, Wm., Rooms 7 and 8, Paterson Natl. Bank, Paterson,
N. J. (42).
- Nelson, Wolfred, C. M., M. D., F. R. G. S., Astor House, New
York, N. Y. (35). **E H**
- Nesmith, Henry E., Jr., 28 South St., New York, N. Y. (30). **B C F**
- Ness, Helge, Professor of Botany, Agric. & Mech. College, College
Station, Texas. (50). **G**
- *Newcomb, Harry T., 137 S. 5th St., Philadelphia, Pa. (47). 1898. **I**
- *Newcomb, Prof. S., 1620 P St. N.W., Washington, D. C. (13).
1874. **A B**
- *Newcombe, Frederick Charles, 1021 E. University Ave., Ann
Arbor, Mich. (43). 1896. **G**
- *Newell, F. H., U. S. Geol. Survey, Washington, D. C. (40). 1893. **E**
- *Newell, William Wells, Editor "Journal American Folk Lore,"
Cambridge, Mass. (41). 1893. **H**
- Newson, John F., Stanford University, Cal. (44). **E**
- *Newson, Henry Byran, Assistant Professor of Mathematics, Uni-
versity of Kansas, Lawrence, Kansas. (50). 1901. **A**
- Nichols, Austin P., 4 Highland Ave., Haverhill, Mass. (37).
- *Nichols, Ernest Fox, Dartmouth College, Hanover, N. H. (41).
1893. **B**
- *Nichols, E. L., Ph. D., Cornell University, Ithaca, N. Y. (28).
1881. **B C**
- Nichols, Othniel Foster, C. E., Principal Assistant Engineer,
New East River Bridge, 42 Gates Ave., Brooklyn, N. Y. (51).
D
- Nicola, Frank F., Cor. Wood and Sixth Aves., Pittsburg, Pa. (50).
D
- Niles, Robert Lossing, 66 Broadway, New York, N. Y. (47). **B C D**
- *Niles, Wm. H., Mass. Inst. Tech., Boston, Mass. (16). 1874. **E**
- *Nipher, Prof. Francis E., Washington University, St. Louis, Mo.
(24). 1876. **B**
- *Nolan, Edw. J., M. D., Acad. Nat. Sciences, Philadelphia, Pa. (29).
1890. **F**
- *Norton, J. B. S., College Park, Md. (47). 1899. **G**
- *NORTON, THOMAS H., U. S. Consul, Harput, Turkey in Asia. (35).
1887. **C**
- Notestein, F. N., Professor of Mathematics and Physics, Alma
College, Alma, Mich. (50). **A B**

MEMBERS AND FELLOWS.

- Nott, Charles Palmer, Palo Alto, Cal. (50).
- *Novy, Dr. Frederick G., Univ. of Michigan, Ann Arbor, Mich. (36). 1889. **C**
- *Noyes, Prof. Arthur A., Mass. Inst. Technology, Boston, Mass (45). 1897. **C**
- Noyes, Isaac Pitman, 409 4th St. S.E., Washington, D. C. (49).
- *Noyes, Miss Mary Chilton, Ph. D., Lake Erie College, Painesville, Ohio. (43). 1896. **B**
- Noyes, Theodore Richards, M. D., Kenwood, N. Y. (51).
- *Noyes, Prof. Wm. A., Rose Polytechnic Institute, Terre Haute, Ind. (23). 1885. **C**
- Nunn, R. J., M. D., 119 York St., Savannah, Ga. (33). **B H**
- *Nuttall, Mrs. Zelia, Peabody Museum, Cambridge, Mass. (35). 1887. **H**
- *Nutting, Prof. Charles C., State University of Iowa, Iowa City, Iowa. (40). 1892. **F**
- Nylander, Olof O., Box 165, Caribou, Maine. (50). **F**
- Oakes, F. James, 58 Stone St., New York, N. Y. (49).
- *Oberholser, Harry Church, Div. Biological Survey, U. S. Dept. Agriculture, Washington, D. C. (46). 1898. **E F H**
- O'Brien, Matthew Watson, M. D., 908 Cameron St., Alexandria, Va. (51). **K**
- Obrig, Adolph, "The Dakota," 1 W. 72d St., New York, N. Y. (50).
- O'Connor, Haldeman, 13 North Front St., Harrisburg, Pa. (51). **H**
- Oestlund, Oscar W., Entomologist, State University, Minneapolis, Minn. (50). **F**
- Offinger, Martin H., M. E., Director Electro-Mech. Dept., Buffalo Commercial and Electro. Mech. Institute, Buffalo, N. Y. (50). **D**
- Ogden, Henry Vining, M. D., 141 Wisconsin St., Milwaukee, Wis. (51). **F K**
- *Ogden, Herbert G., U. S. C. and G. Survey, Washington, D. C. (38) 1891. **E**
- Ogden, Herbert Gouverneur, Jr., M. E., 1610 Riggs Place, Washington, D. C. (50). **B D**
- Ogilvie, Miss Ida Helen, Sherman Square Hotel, New York, N. Y. (51). **E**
- Oglevee, Christopher S., Instructor in Biology, Lincoln University, Lincoln, Ill. (50). **F**
- O'Harra, Prof. Cleophas Cisney, State School of Mines, Rapid City, So. Dak. (49).
- Olcott, George M., 86 William St., New York, N. Y. (49).
- Oldfield, Anthony M., M. D., Harbor Beach, Mich. (51). **K**
- Olive, Edgar W., University Museum, Cambridge, Mass. (48). **G**
- Olmsted, John Charles, Landscape Architect, 16 Warren St., Brookline, Mass. (50). **E I**
- Olsen, Tinius, Manufacturer, 500 N. 12th St., Philadelphia, Pa. (51). **D**

MEMBERS AND FELLOWS.

Oothout, William, Chemist, Metallurgist and Mining Engineer, Santa Barbara, Cal. (50). **C D E**

Opdyke, William S., 20 Nassau St., New York, N. Y. (49).

*Orleman, Miss Daisy M., M. D., Peekskill Military Academy, Peekskill, N. Y. (40). 1897. **F**

*Orleman, Col. Louis H., Ph. D., Principal Peekskill Military Academy, Peekskill, N. Y. (47). 1900.

*Orr, William, Jr., 30 Firglade Ave., Springfield, Mass. (39). 1895.

B F

Ortmann, Arnold Edward, Ph. D., Curator of Invertebrate Paleontology, Princeton University, 8 Maple St., Princeton, N. J. (51).

*Orton, Edward, Jr., The Normandie, Columbus, Ohio. (48). 1900.

E

*Orton, W. A., Div. of Veg. Phys. and Path., U. S. Dept. Agriculture, Washington, D. C. (49). **G**

Osborn, Frederick A., Professor of Physics, Olivet Coll., Olivet, Mich. (50). **B**

*Osborn, Henry F., Columbia University, New York, N. Y. (29). 1883. **F**

*Osborn, Herbert, Ohio State University, Columbus, Ohio. (32). 1884. **F**

Osborn, Mrs. W. H., 32 Park Ave., New York, N. Y. (50).

Osborne, Frank Russell, Professor of Physics, John B. Stetson University, DeLand, Fla. (50). **B**

Osborne, George Abbott, Professor of Mathematics, Mass. Inst. of Technology, Boston, Mass. (50). **A**

Osborne, Loyall Allen, E. E., Mgr. of Works of Westinghouse Electric and Mfg. Co., Pittsburg, Pa. (50). **D**

Osburn, Raymond Carroll, Professor of Zoology, Fargo College, Fargo, North Dakota. (50). **F**

Osgood, Joseph B. F., Salem, Mass. (31).

Osler, William, M. D., Johns Hopkins University, Baltimore, Md. (51). **F K**

*Osmond, Prof. I. Thornton, State College, Pa. (33). 1889. **A B C**

O'Sullivan, Rev. Denis T., S. J., 761 Harrison St., Boston, Mass. (40). **A B**

Otis, Spencer, 1502 Fisher Building, Chicago, Ill. (51). **D**

Owen, Charles Lorin, Field Columbian Museum, Chicago, Ill. (50).

H

Owen, Prof. D. A., Franklin, Ind. (34). **E**

Owen, Miss Juliette A., 306 N. Ninth St., St. Joseph, Mo. (50). **F**

Owen, Miss Luella Agnes, 306 N. Ninth St., St. Joseph, Mo. (47). **E**

Owen, Miss Mary Alicia, 306 N. Ninth St., St. Joseph, Mo. (50). **H**

Owens, William Gundy, Professor of Chemistry and Physics, Bucknell University, Lewisburg, Pa. (50). **B C**

MEMBERS AND FELLOWS.

- *Packard, Dr. A. S., 115 Angell St., Providence, R. I. (16). 1875. **E F**
- Packard, Frederick A., M. D., 258 So. 18th St., Philadelphia, Pa. (51). **K**
- Packard, George Arthur, Metallurgist and Mining Engineer, 18 Lafayette St., Wakefield, Mass. (50). **E**
- Packard, John C., 14 Searle Ave., Brookline, Mass. (48). **B**
- *Paddock, Wendell, Professor of Botany and Horticulture, Agricultural College, Fort Collins, Colo. (50). 1901. **G**
- PAGE, CLARENCE V., Civil and Mining Engineer, P. O. Box 922, Butte, Montana. (51). **D E**
- PAGE, DR. DUDLEY L., 46 Merrimack St., Lowell, Mass. (33). **F**
- PAGE, MRS. NELLIE K., 46 Merrimack St., Lowell, Mass. (33). **F**
- *Paine, Cyrus F., 242 East Ave., Rochester, N. Y. (12). 1874. **A B**
- Paine, Robert Treat, President, Associated Charities of Boston, 6 Joy St., Boston, Mass. (50). **I**
- Painter, Charles Fairbank, M. D., 372 Mulboro St., Boston, Mass. (50). **F K**
- *Palache, Charles, University Museum, Cambridge, Mass. (44). 1896. **E**
- *Palmer, Prof. Albert De Forest, Brown University, Providence, R. I. (47). 1900. **B**
- *Palmer, Prof. Arthur William, 804 W. Green St., Urbana, Ill. (46). 1898. **C**
- *Palmer, Charles Skeelee, Ph. D., Professor of Chemistry, University of Colorado, Boulder, Colo. (50). 1901. **C**
- Palmer, Dr. Edward, Botanical Div., U. S. Dept. Agriculture, Washington, D. C. (22). **H**
- Palmer, Walter Keifer, 411 New York Life Bldg., Kansas City, Mo. (47). **B D**
- Paltsits, Victor Hugo, Assistant Librarian, Lenox Library, New York, N. Y. (51).
- *Pammel, Prof. L. H., Iowa Agricultural College, Ames, Ia. (39). 1892. **G**
- PARISH, HENRY, 52 Wall St., New York, N. Y. (49).
- *Park, Roswell, M. D., 510 Delaware Ave., Buffalo, N. Y. (45). 1901. **H K**
- Park, William Hallock, M. D., 315 West 76th St., New York, N. Y. (51). **K**
- Parker, Miss Florence, 10340 Longwood Ave., Chicago, Ill. (50). **E**
- *Parker, George Howard, Assistant Professor of Zoology, Harvard University, Cambridge, Mass. (50). 1901. **F**
- *Parker, Herschel C., 21 Fort Greene Place, Brooklyn, N. Y. (43). 1900. **C**
- Parker, Horatio N., Biologist to Metropolitan Water Board, 456 Bloomfield Ave., Montclair, N. J. (50). **F**

MEMBERS AND FELLOWS.

- Parker, J. B., M. D., U. S. N., U. S. Naval Home, Philadelphia, Pa. (50). **K**
- Parker, Moses Greeley, M. D., 11 First St., Lowell, Mass. (47). **H**
- Parker, Richard Alexander, C. E., E. M., 4 P. O. Square, Boston, Mass. (50). **D E**
- Parker, William L., 339 Marlborough St., Boston, Mass. (50).
- *PARKHURST, HENRY M., 173 Gates Ave., Brooklyn, N. Y. (23). 1874. **A**
- *Parks, C. Wellman, Civil Engineer, U. S. N., Bureau of Navigation, Washington, D. C. (42). 1897.
- Parmelee, H. P., 508 Mich. Trust Bldg., Grand Rapids, Mich. (42). **E H**
- Parmly, C. Howard, C. E., Asst. Prof. of Physics, College of the City of New York, N. Y. (50). **B**
- Parsell, Henry V. A., 31 E. 21st St., New York, N. Y. (49).
- *Parsons, Prof. Charles Lathrop, Durham, N. H. (41). 1896.
- Parsons, Mrs. Edwin, 326 W. 90th St., New York, N. Y. (50).
- PARSONS, JOHN E., 111 Broadway, New York, N. Y. (36).
- Pastorius, Charles Sharpless, Treasurer, Colo. Investment and Realty Co., P. O. Box 428, Colorado Springs, Colo. (51).
- Paton, Stewart, M. D., 213 W. Monument St., Baltimore, Md. (50). **K**
- Patrick, Frank, 601 Kansas Ave., Topeka, Kansas. (50).
- Patten, John, Patten Vacuum Ice Co. Ltd., 19 Liberty St., New York, N. Y. (43).
- Patten, Miss Juliet, 2212 R St. N.W., Washington, D. C. (49). **C F G**
- Patterson, Charles H., Professor of English Language and Literature, University of West Virginia, Morgantown, W. Va. (51). **H**
- Patterson, Mrs. Flora Wambaugh, U. S. Dept. Agriculture, Washington, D. C. (44). **G**
- *Patterson, George W., Jr., 814 S. University Ave., Ann Arbor, Mich. (44). 1896.
- *Patterson, Harry J., College Park, Md. (36). 1890. **C**
- Patterson, Prof. James L., Chestnut Hill, Philadelphia, Pa. (45).
- Pattison, Frank A., Consulting Electrical Engineer, 141 Broadway, New York, N. Y. (50). **D**
- Patton, Arthur L., State Preparatory School, Boulder, Colo. (50). **B C**
- *Patton, Horace B., Professor of Geology and Mineralogy, Colorado School of Mines, Golden, Colo. (37). 1901. **E**
- Patton, John, Counsellor-at-law, 925 Mich. Trust Co. Bldg., Grand Rapids, Mich. (50). **I**
- *Paul, Henry M., 2015 Kalorama Av., Washington, D. C. (33). 1885. **A B**

MEMBERS AND FELLOWS.

- *Paulmier, Frederick Clark, N. Y. State Museum, Albany, N. Y. (47). 1901. **F**
- Pawling, Jesse, Jr., Instructor in Physics, Central High School, Philadelphia, Pa. (50). **A B**
- Peabody, George Foster, 28 Monroe Place, Brooklyn, N. Y. (50).
- Peabody, Mrs. Lucy E., 1430 Corona St., Denver, Colo. (50). **H**
- Pearce, James Edwin, Principal of High School, 309 W. 10th St., Austin, Texas. (51). **H**
- Pearson, Fred. Stark, Consulting Engineer, Room 840, Cable Bldg., 621 Broadway, New York, N. Y. (50). **D**
- *Pearson, Raymond A., Asst. Chief Dairy Div., U. S. Dept. Agriculture, Washington, D. C. (49). 1901. **F**
- Pease, Miss Clara A., Public High School, Hartford, Conn. (47). **E**
- Peck, Frederick B., Lafayette College, Easton, Pa. (49).
- Peck, George, M. D., U. S. N., 926 North Broad St., Elizabeth, N. J. (51). **K**
- Peck, Mrs. John Hudson, 3 Irving Place, Troy, N. Y. (28).
- Peck, W. A., C. E., 1643 Champa St., Denver, Colo. (19). **E**
- *Peckham, Wheeler H., 80 Broadway, New York, N. Y. (36). 1901.
I
- *Peirce, Benjamin O., 305 Cabot St., Beverly, Mass. (47). 1898.
- Peirce, Cyrus N., D. D. S., 3316 Powelton Ave., Philadelphia, Pa. (31). **F**
- *Peirce, George James, Associate Professor of Plant Physiology, Stanford University, Cal. (44). 1897. **G**
- Peirce, Harold, 331 Walnut St., Philadelphia, Pa. (33). **H I**
- Pell, Mrs. Alfred, 15 East 35th St., New York, N. Y. (51).
- Pendleton, Edward Waldo, 900 Union Trust Building, Detroit, Mich. (46). **H I**
- Penfield, S. L., Prof. Yale University, New Haven, Conn. (51).
- Pennell, William W., M. D., Fredericktown, Ohio. (51). **K**
- Penniman, George H., 1071 Fifth Ave., New York, N. Y. (49).
- *Pennington, Miss Mary Engle, Ph. D., 3908 Walnut St., Philadelphia, Pa. (47). 1900. **C F G**
- Penrose, Charles B., M. D., 1720 Spruce St., Philadelphia, Pa. (51). **B K**
- *PENROSE, DR. R. A. F., JR., Ph. D., 460 Bullitt Building, Philadelphia, Pa. (38). 1890. **E**
- *Pepper, George H., Amer. Mus. Nat. History, Central Park, New York, N. Y. (48). 1900. **H**
- Perkins, Albert S., Teacher of Chemistry, Dorchester High School, 75 Milton Ave., Hyde Park, Mass. (50). **C**
- PERKINS, ARTHUR, 14 State St., Hartford, Conn. (31). **A B**
- *Perkins, Prof. Charles Albert, University of Tennessee, Knoxville, Tenn. (47). 1900. **B D**
- *Perkins, Prof. George H., Burlington, Vt. (17). 1882. **E F H**

MEMBERS AND FELLOWS.

- Perrine, Miss Lura L., State Normal School, Valley City, No. Dak. (47). **E F G H**
- *Perry, Arthur C., 226 Halsey St., Brooklyn, N. Y. (43). 1896. **A B**
- Perry, Thomas Sergeant, Author, 312 Marlborough St., Back Bay, Boston, Mass. (50).
- Peskind, Arnold, M. D., 1354 Willson Ave., Cleveland, Ohio. (51). **K**
- Peters, Clayton A., Polytechnic Institute, Brooklyn, N. Y. (46). **G**
- *Peters, Edw. T., P. O. Box 265, Washington, D. C. (33). 1889. **I**
- Petersen, Niels Frederick, Plainview, Neb. (50). **I**
- Peterson, Bertel, Genl. Mgr. Grand Central Mining Co., Ltd., Torres, Sonora, Mexico. (50). **D**
- *Peterson, Frederick, M. D., 4 W. 50th St., New York, N. Y. (49). 1901. **K**
- Peterson, Sidney, Brighton High School, Boston, Mass. (50). **C G**
- Pétre, Axel, P. O. Box 1606, Philadelphia, Pa. (48). **D**
- Pettee, Charles Holmes, Durham, N. H. (47). **A**
- Pettee, Rev. J. T., Meriden, Conn. (39). **I**
- *Pettee, Prof. Wm. H., 554 Thompson St., Ann Arbor, Mich. (24). 1875. **E**
- Pettegrew, David Lyman, P. O. Box 75, Worcester, Mass. (44). **A**
- Phelps, William Joshua, Mgr. The Phelps Co., Detroit, Mich. (50). **D I K**
- Philips, Ferdinand, of Philips, Townsend & Co., Manufacturers, 4th & Glenwood Ave., Philadelphia, Pa. (51). **D**
- *Phillips, Prof. Andrew W., 209 York St., New Haven, Conn. (24). 1879.
- *Phillips, Prof. Francis C., Box 126, Allegheny, Pa. (36). 1889. **C**
- Phillips, John S., 141 E. 25th St., New York, N. Y. (46).
- PHIPPS, LAWRENCE COWLE, Carnegie Bldg., Pittsburg, Pa. (51). **D**
- Pickel, Frank Welborn, Prof. of Biology, Univ. of Arkansas, Fayetteville, Ark. (71). **G**
- *Pickering, Prof. Edward C., Director of Harvard Observatory, Cambridge, Mass. (18). 1875. **A B**
- Pickett, Dr. Thomas E., Maysville, Ky. (25). **F H**
- Pickett, William Douglas, Four Bear, Big Horn Co., Wyoming. (41). **D I**
- Piel, G., 148 Riverside Drive, New York, N. Y. (50).
- *PIERCE, NEWTON B., Pacific Coast Laboratory, U. S. Dept. Agriculture, Santa Ana, Cal. (49). 1901. **G**
- *Pierce, Perry Benjamin, U. S. Patent Office, Washington, D. C. (40). 1895. **H**
- Pierce, Sloan J., 512 Hickox Bldg., Cleveland, Ohio. (50). **E**
- PIERREPONT, HENRY E., 216 Columbia Heights, Brooklyn, N. Y. (43).
- Piersol, George A., Professor of Anatomy, University of Pennsylvania, Philadelphia, Pa. (50). **K**

MEMBERS AND FELLOWS.

- Pietrzycki, Marcel, M. D., Starbuck, Wash. (51). **I**
- Pilcher, James Evelyn, Ph. D., Professor of Sociology and Economics, Dickinson College, Carlisle, Pa. (50). **I**
- Pilling, J. W., 1301 Massachusetts Ave. N.W., Washington, D. C. (40).
- *Pillsbury, J. E., Commander U. S. N., U. S. S. "Prairie," care Postmaster, New York, N. Y. (33). 1898. **B E**
- Pillsbury, John H., Prin. of The Waban School, Waban, Mass. (23). **F H**
- *Pinchot, Gifford, Forester, U. S. Dept. Agriculture, Washington, D. C. (47). 1899. **G**
- Pinchot, J. W., 1615 Rhode Island Ave. N.W., Washington, D. C. (50). **G**
- Pinkerton, Andrew, Electrical Engineer, Vandergrift, Pa. (50). **D**
- *Pinney, Mrs. Augusta Robinson, 350 Central St., Springfield, Mass. (44). **F G**
- Pitkin, Lucius, 138 Pearl St., New York, N. Y. (29).
- Pitner, Thomas J., M. D., Trustee Illinois College, Jacksonville, Ill. (51). **K**
- Pitts, Thomas Dorsey, Naval Architect and Engineer, Room 1200, No. 52 Pine St., New York, N. Y. (51). **D**
- Plant, Albert, 28 East 76th St., New York, N. Y. (50).
- Platt, Hon. Thomas C., United States Senator, 49 Broadway, New York, N. Y. (49).
- Platt, Walter B., M. D., 802 Cathedral St., Baltimore, Md. (50). **K**
- Plimpton, George Arthur, 70 5th Ave., New York, N. Y. (47).
- Plowman, Amon Benton, Greenville, Ohio. (50). **B**
- *Pohlman, Dr. Julius, 404 Franklin St., Buffalo, N. Y. (32). 1884. **E F**
- Pole, Arminius C., M. D., 2038 Madison Ave., Baltimore, Md. (51). **K**
- *Pollard, Charles Louis, 1854 5th St. N.W., Washington, D. C. (44). 1899. **G**
- Pollock, Horatio M., Ph. D., N. Y. State Civil Service Commission, Albany, N. Y. (50). **F**
- Pomeroy, Charles Taylor, 55 Broad St., Newark, N. J. (43).
- Porteous, John, 48 St. Stephen St., Boston, Mass. (22).
- Porter, Miss Edna, 94 Russell Ave., Buffalo, N. Y. (41). **F G**
- Porter, H. Hobart, Jr., Consulting Electrical and Mechanical Engineer, 31 Nassau St., New York, N. Y. (50). **D**
- Porter, Henry K., Trustee of Carnegie Institute, 541 Wood St., Pittsburg, Pa. (50). **D**
- Porter, J. Edward, Mfg. Chemist and Analyst, 8 Clinton Block, Syracuse, N. Y. (50). **C**
- Porter, Miles F., M. D., 207 W. Wayne St., Ft. Wayne, Ind. (51). **K**
- *Porter, W. Townsend, M. D., Assistant Professor of Physiology, Harvard Medical School, Boston, Mass. (50). 1901. **K**

MEMBERS AND FELLOWS.

- *Post, Charles A., Bayport, Long Island, N. Y. (49). 1901. **A**
- Post, Walter A., General Superintendent, Newport News Shipbuilding and Dry-dock Co., Newport News, Va. (51). **D**
- Poteat, Wm. L., Wake Forest, N. C. (47). **F**
- Potter, Richard B., M. D., West Palm Beach, Fla. (51). **K**
- Potter, William Bancroft, Chief Engineer, Ry. Dept. G. E. Co., Schenectady, N. Y. (50). **D**
- Powel, Colonel de Veaux, 28 Broadway, N. Y. (50).
- Powell, George P., The Buckingham Hotel, cor. 50th St. and Fifth Ave., New York, N. Y. (49).
- Powell, James, Mechanical Engineer, 2525 Spring Grove Ave., Cincinnati, Ohio. (51). **D**
- *Powell, Major J. W., Director, Bureau of American Ethnology, Washington, D. C. (23). 1875. **E H**
- Powell, Thomas, M. D., 215-217 Laughlin Bldg., Los Angeles, Cal. (41).
- *Power, Frederick B., Ph. D., 6 King St., Snow Hill, London, E. C., England. (31). 1887. **C**
- Prang, Louis, 45 Centre St., Roxbury, Mass. (29). **D**
- Prather, Wm. L., Ph. D., President of the University of Texas, Austin, Texas. (50). **I**
- Pratt, Alexander, Jr., 26 Bunnell St., Bridgeport, Conn. (50). **H I**
- Pratt, Chas. W., Supt. City Schools, Augusta, Kans. (50). **F**
- Pratt, Joseph Hyde, N. C. Geological Survey, Chapel Hill, N. C. (49). **E**
- Prentiss, Daniel Webster, M. D., 1101 14th St. N.W., Washington, D. C. (50). **F K**
- *Prentiss, Robert W., Professor of Mathematics and Astronomy, Rutgers College, New Brunswick, N. J. (40). 1891. **A**
- *Prescott, Prof. Albert B., Ann Arbor, Mich. (23). 1875. **C**
- Prescott, Samuel Cate, Instructor in Biology, Mass. Inst. Tech., Boston, Mass. (51). **K**
- Price, Robert Henderson, Professor of Horticulture and Mycology, A. & M. College, College Station, Texas. (50). **F G**
- Price, Thomas Malcolm, Assistant Chemist, Maryland Agricultural Exper. Sta., College Park, Md. (50). **C**
- Price, Weston A. V., 2238 Euclid Ave., Cleveland, Ohio. (48). **B C**
- Prince, J. Dyneley, 31 W. 38th St., New York, N. Y. (49).
- Pritchard, Samuel Reynolds, Blacksburg, Va. (47). **D**
- Pritchard, William Broaddus, M. D., 105 W. 73d St., New York, N. Y. (51). **K**
- *Pritchard, Henry S., President Mass. Inst. Technology, Boston, Mass. (29). 1881. **A**
- Probasco, John Buck, M. D., 175 E. Front St., Plainfield, N. J. (51). **K**
- *Proctor, Miss Mary, 141 W. 47th St., New York, N. Y. (43). 1898.

A

MEMBERS AND FELLOWS.

*Prosser, Charles S., Ohio State Univ., Columbus, Ohio. (33). 1891.

E F

Proudfit, Alexander Couper, 40 Wall St., New York, N. Y. (47).

PRUYN, JOHN V. L., JR., Albany, N. Y. (29).

Pryer, Charles, New Rochelle, N. Y. (49).

Puffer, William L., Assistant Professor of Electrical Engineering,
Mass. Institute of Technology, Boston, Mass. (50). **D**

Pulsifer, Mrs. C. L. B., Nonquitt, Mass. (33).

*Pulsifer, Wm. H., Nonquitt, Mass. (26). 1879. **A H**

*Pupin, Dr. M. I., Columbia University, New York, N. Y. (44).
1896. **B**

Purdue, Albert Homer, Professor of Geology, University of Ar-
kansas, Fayetteville, Ark. (50). **E**

Purington, Miss Florence, B. S., Mount Holyoke College, South
Hadley, Mass. (46). **A**

Puryear, Chas., Professor of Mathematics, Agric. and Mech.
College, College Station, Tex. (51). **A**

Pusey, Charles W., M. E., President The Pusey & Jones Co.,
Wilmington, Del. (51). **D**

Putnam, Chas. P., M. D., 63 Marlborough St., Boston, Mass. (28).

Putnam, Miss Elizabeth D., 2013 Brady St., Davenport, Iowa.
(45).

*Putnam, Prof. F. W., Peabody Museum, Cambridge, Mass. (10).
1874. **H**

Putnam, Henry St. Clair, Davenport, Iowa. (47).

Putnam, Mrs. Mary L. D., President of the Davenport Academy
of Science, Davenport, Iowa. (50). **H**

Pyle, Miss Effie B., Teacher of Science, High School, Hiawatha,
Kansas. (51). **B C**

Quackenbos, John D., M. D., 331 W. 28th St., New York, N. Y.
(49).

Quintard, Edward A., Sewanee, Tenn., Supt. of Mines at Bato-
pilas, Mexico. (50). **E**

*Ramaley, Francis, University of Colorado, Boulder, Colo. (45).
1899. **G**

Ramsey, Rolla Roy, 814 Conley Ave., Columbia, Mo. (50). **B**

Rand, C. F., M. D., 1228 15th St. N.W., Washington, D. C. (27).

E H

Rand, Herbert Wilbur, Ph. D., Instructor in Zoology, Harvard
University, Cambridge, Mass. (51). **F**

*Rand, Theodore D., Radnor, Pa. (47). 1901. **E**

Randall, Burton Alexander, M. D., 1717 Locust St., Phila-
delphia, Pa. (51). **K**

Randall, John E., Superintendent and Electrical Engineer,
Columbia Inc. Lamp Co., St. Louis, Mo. (50). **D**

Randolph, Beverley S., Mining Supt. Consolidation Coal Co.,
Frostburg, Md. (50). **D E**

MEMBERS AND FELLOWS.

- Randolph, Prof. L. S., Blacksburg, Va. (33). **D**
- *Rane, Frank Wm., New Hampshire Agric. Exper. Station, Durham, N. H. (42). 1900. **G**
- Rankin, Walter M., Professor of Invertebrate Zoology, Princeton University, Princeton, N. J. (51). **F**
- Ransohoff, Joseph, M. D., Cincinnati, Ohio. (51). **K**
- Ransome, Ernest Leslie, Concrete Engineer, 532 9th St., Brooklyn, N. Y. (51). **D**
- *Rathbun, Richard, Smithsonian Institution, Washington, D. C. (40). 1892. **F**
- Rau, Albert George, Principal Moravian Parochial School, 63 Broad St., Bethlehem, Pa. (50). **B E**
- Raymer, George Sharp, E. M., Instructor in Mining, Harvard University, Cambridge, Mass. (50). **D E**
- *Raymond, Rossiter W., 99 John St., New York, N. Y. (15). 1875. **E I**
- *Raymond, William G., Rensselaer Polytechnic Institute, Troy, N. Y. (44). 1896. **D**
- Reber, Samuel, Lieut. Col. U. S. A., Signal Corps, Headquarters of the Army, Washington, D. C. (50). **D**
- Rèche, Miss Eugénie M., 31 Howell St., Rochester, N. Y. (41). **E H**
- Reckefus, Chas. H., Jr., M. D., 506 N. 6th St., Philadelphia, Pa. (51). **K**
- Redding, Allen C., Tybo, Nevada. (39). **C**
- Redfield, William C., 3 Tennis Court, Brooklyn, N. Y. (44). **D**
- Reed, Charles J., 3313 N. 16th St., Philadelphia, Pa. (34). **B C**
- Reed, Hugh D., Ithaca, N. Y. (49).
- Reed, Hon. James H., Amberson Ave., Pittsburg, Pa. (51). **I**
- *Reed, John O., 907 Lincoln Ave., Ann Arbor, Mich. (44). 1898. **B**
- Rees, H. P. Powell, 38 Park Row, New York, N. Y. (49).
- *Rees, Prof. John K., Columbia University, New York, N. Y. (26). 1878. **A B E**
- *Reese, Charles L., N. J. Zinc Co., Palmerton, Pa. (39). 1892. **C**
- Reese, Herbert M., Mt. Hamilton, Cal. (49). **B**
- *Reese, Jacob, 400 Chestnut St., Philadelphia, Pa. (33). 1891. **B D**
- *Reid, Harry Fielding, Johns Hopkins University, Baltimore, Md. (36). 1893. **B**
- *Reid, Hon. Whitelaw, 451 Madison Ave., New York, N. Y. (50). 1901. **I**
- Reifsnyder, Samuel K., High School, Ocean Grove, N. J. (50). **I**
- Reist, Henry G., Mechanical and Electrical Engineer, 5 South Church St., Schenectady, N. Y. (50). **D**
- *Remsen, Prof. Ira, President Johns Hopkins University, Baltimore, Md. (22). 1875. **C**
- Renninger, John S., M. D., Marshall, Minn. (31). **C F**
- *Replogle, Mark A., M. E., Hydraulic Engineer, 111 S. Walnut St., Akron, Ohio. (51). **D**

MEMBERS AND FELLOWS.

- *Reuter, Dr. Ludwig H., 443 East 87th St., New York, N. Y. (46).
1898. **C**
- Reynolds, Dudley Sharpe, M. D., Louisville, Ky. (50). **K**
- Reynolds, George, P. O. Box B, Salt Lake City, Utah. (44). **H**
- Rhoads, Edward, Haverford College, Haverford, Pa. (47). **B**
- RHODES, JAMES FORD, Author and Historian, 392 Beacon St.,
Boston, Mass. (50). **I**
- Rice, Edward L., A. B., Ohio Wesleyan University, Delaware,
Ohio. (43).
- Rice, Edwin Wilbur, Jr., General Electric Co., Schenectady, N. Y.
(50). **D**
- Rice, John Ainsworth, Mining Engineer, Bland, New Mexico.
(50). **D E**
- Rice, Martin Everett, Asst. Professor of Physics and Electrical
Engineering, University of Kansas, Lawrence, Kans. (50).
B D
- *Rice, Prof. W. North, Wesleyan University, Middletown, Conn.
(18). 1874. **E F**
- Rich, Jacob Monroe, 50 W. 38th St., New York, N. Y. (33). **A B**
- Rich, Michael P., M. D., 50 W. 38th St., New York, N. Y. (40).
- Richard, Montrose R., M. D., 77 E. 116th St., New York, N. Y.
(51). **K**
- Richards, Alfred N., 45 West 60th St., New York, N. Y. (50).
- *Richards, Charles B., 237 Edwards St., New Haven, Conn. (33).
1885. **D**
- *RICHARDS, EDGAR, 341 W. 88th St., New York, N. Y. (31). 1886. **C**
- *Richards, Prof. Robert H., Mass. Institute of Technology, Boston,
Mass. (22). 1875. **D**
- *Richards, Mrs. Robert H., Mass. Institute of Technology, Boston,
Mass. (23). 1878. **C**
- *Richards, Prof. Theodore William, Harvard University, Cam-
bridge, Mass. (47). 1899.
- Richardson, Alonzo Blair, M. D., Supt. of Government Hospital
for Insane, Washington, D. C. (50). **K**
- Richardson, Major Charles A., Canandaigua, N. Y. (50). **I**
- Richardson, Prof. Charles Henry, Ph. D., Dartmouth College,
Hanover, N. H. (47). **E**
- Richardson, Dr. Charles Williamson, 1102 L St. N.W., Wash-
ington, D. C. (49).
- *Richardson, Clifford, Barber Asphalt Paving Co., Long Island
City, N. Y. (30). 1884. **C**
- Richardson, Miss Harriet, Smithsonian Institution, Washington,
D. C. (49). **F**
- Richardson, Mark Wyman, M. D., 90 Equitable Building, Boston,
Mass. (51). **K**
- . Richmond, William Henry, 3425 North Main Ave., Scranton, Pa.
(50). **E**

MEMBERS AND FELLOWS.

- Rickard, T. A., Mining Engineer and Geologist, University Club, Denver, Colo., (50). **D E**
- Ricker, Maurice, Principal of High School, Burlington, Iowa. (50). **F**
- Ricker, N. Clifford, Dean of the College of Engineering, University of Illinois, Urbana, Ill. (50). **D**
- Ricketts, Louis D., Consulting Mining Engineer, 99 John St. New York, N. Y. (50). **D E**
- *Ricketts, Prof. Palmer C., 17 1st St., Troy, N. Y. (33). 1887. **A D**
- *Ricketts, Prof. Pierre de Peyster, 104 John St., New York, N. Y. (26). 1880. **C D E**
- Ricketts, Col. R. Bruce, Wilkesbarre, Pa. (33). **E**
- Riddell, John, Mechanical Superintendent, General Electric Co., 1132 State St., Schenectady, N. Y. (51). **D**
- Riddle, Lumina C., 160 West Fifth Ave., Columbus, Ohio. (48). **G**
- Ries, Elias E., E. E., 116 Nassau St., New York, N. Y. (33). **B D I**
- *Ries, Heinrich, Ph. B., Ithaca, N. Y. (41). 1898. **E**
- Riesman, David, M. D., 326 S. 16th St., Philadelphia, Pa. (51). **K**
- *Riggs, Robert Baird, Ph. B., Professor of Chemistry, Trinity College, Hartford, Conn. (50). 1901. **C**
- Riggs, Walter Merritt, Professor of Electrical Engineering, Clemson, College, S. C. (50). **B D**
- Riker, Samuel, 27 E. 69th St., New York, N. Y. (50).
- Rissmann, Otto, General Manager Cherokee-Lanyon Spelter Co., Iola, Kan. (50). **D E**
- Ritchie, Craig D., Conveyancer, 414 N. 34th St., Philadelphia, Pa. (51).
- *Ritter, William Emerson, Associate Professor of Zoology, University of California, Berkeley, Cal. (50). 1901. **F**
- Robb, J. Hampden, 23 Park Ave., New York, N. Y. (50).
- Robbins, Fred. W., Superintendent of Schools, Bethlehem, Pa. (50). **I**
- Roberts, Miss Jennie B., 231 William St., Port Chester, N. Y. (43).
- Roberts, John M., Principal, High School, and Instructor in Science, Marshall, Mo. (50). **F G**
- Roberts, Milnor, Professor of Mining and Metallurgy, University of Washington, Seattle, Wash. (50). **D E**
- Roberts, Thomas Paschall, Civil Engineer, 361 North Craig St., Pittsburg, Pa. (51). **D**
- Roberts, Rev. William C., D. D., LL.D., President of Central University, Danville, Ky. (50).
- Robeson, A. M., Douglas Island, Alaska. (49).
- *Robinson, Benjamin Lincoln, Curator Harvard Herbarium, Cambridge, Mass. (41). 1893. **G**
- Robinson, Charles Dwight, Newburgh, N. Y. (50). **I**
- *Robinson, Prof. Franklin C., Bowdoin College, Brunswick, Me. (29). 1889. **C D**

MEMBERS AND FELLOWS.

- *Robinson, Prof. Otis Hall, 273 Alexander St., Rochester, N. Y. (23). 1901. **A B**
- Robinson, Sanford, C. E., E. M., Steeple Rock, New Mexico. (50). **D**
- Robinson, Samuel Adams, M. D., 135 North 22d St., Portland, Oregon. (51). **H I K**
- *Robinson, Prof. S. W., 1353 Highland St., Columbus, Ohio. (30). 1883. **A B D**
- Rochester, DeLancey, M. D., 469 Franklin St., Buffalo, N. Y. (35). **F**
- Rockey, A. E., M. D., 778 Flanders St., Portland, Oregon. (51). **K**
- *Rockwell, Gen. Alfred P., Manchester, Mass. (10). 1882. **E**
- Rockwood, Charles G., 70 South 11th St., Newark, N. J. (36).
- *Rockwood, Prof. Charles G., Jr., 34 Bayard Lane, Princeton, N. J. (20). 1874. **A B D E**
- Rockwood, Elbert W., Professor of Chemistry and Toxicology, College of Medicine, State University of Iowa, Iowa City, Iowa. (50). **C K**
- Rockwood, George I., 62 Summer St., Worcester, Mass. (47). **D**
- Rodman, Charlie S., M. D., Waterbury, Conn. (51). **K**
- Roe, Edward Drake, Jr., Associate Professor of Mathematics, Syracuse University, Syracuse, N. Y. (50). **A**
- Roessler, Franz, 73 Pine St., New York, N. Y. (39).
- Rogers, Arthur Curtis, M. D., Supt. Minn. School for Feeble-Minded, Faribault, Minn. (51). **K**
- Rogers, Edward L., 71 Broadway, New York, N. Y. (50).
- Rogers, John T., M. D., 5th and St. Peter Sts., "Lowry Arcade," St. Paul, Minn. (51). **K**
- *Rolf, Peter H., Tropical Laboratory U. S. Department Agriculture, Miami, Fla. (41). 1899. **G**
- Rollins, William Herbert, M. D., 250 Marlborough St., Boston, Mass. (50). **B K**
- *Rominger, Dr. Carl, Ann Arbor, Mich. (21). 1879. **E**
- *Rood, Prof. Ogden N., Columbia University, New York, N. Y. (14). 1875. **B**
- ROOSEVELT, MRS. MARION T., 57 Fifth Ave., New York, N. Y. (31). **H I**
- *Root, Hon. Elihu, Secretary of War, Washington, D. C. (50). 1901. **I**
- Rorer, James Birch, 1715 Chestnut St., Philadelphia, Pa. (51). **G**
- Rorer, Jonathan T., Ph. D., Central High School, Philadelphia, Pa. (47).
- *Rosa, Edward Bennett, Wesleyan University, Middletown, Conn. (39). 1892. **A B**
- Rosenau, Milton J., M. D., Director Hygienic Laboratory, Marine Hospital Service, Washington, D. C. (51). **K**

MEMBERS AND FELLOWS.

- Rosenthal, Edwin, M. D., 517 Pine St., Philadelphia, Pa. (51). **K**
- Ross, Bennett Battle, Professor of Chemistry, Alabama Polytechnic Institute, Auburn, Ala. (45). **C**
- Ross, Denman Waldo, Ph. D., Cambridge, Mass. (29).
- *Rotch, A. Lawrence, Director of Blue Hill Meteorological Observatory, Hyde Park, Mass. (39). 1896. **B**
- Roth, Filibert, U. S. Dept. of Agriculture, Washington, D. C. (39). **F**
- Rothe, Wm. G., 226 Stuyvesant Ave., Brooklyn, N. Y. (43).
- Rothschild, Jacob, Hotel Majestic, New York, N. Y. (50).
- Rotzell, W. E., M. D., Narberth, Pa. (45). **F H**
- *Rowlee, W. W., Cornell Univ., Ithaca, N. Y. (41). 1894. **G**
- Roy, Arthur J., C. E., First Assistant, Dudley Observatory, Albany, N. Y. (50). **A**
- Rucker, Miss Augusta, University of Texas, Austin, Texas. (51).
- Ruddick, William H., M. D., So. Boston, Mass. (51). **F K**
- Ruete, Otto M., Ph. D., Analytical and Consulting Chemist, Dubuque, Iowa. (51). **C E**
- Ruland, Frederick D., M. D., Westport, Conn. (51). **B C K**
- Ruland, M. A., 53 Linden Ave., Flatbush, Brooklyn, N. Y. (43).
- *Runkle, Prof. John D., 15 Everett St., Cambridge, Mass. (2). 1875. **A D**
- Running, Theodore R., Ph. D., Professor of Mathematics and Natural Sciences, St. Olaf College, Northfield, Minn. (50). **A**
- Runyon, William Henry, Teacher of Science, Lyons Township High School, La Grange, Ill. (50). **B F**
- Rupp, August, A. B., College of City of New York, New York, N. Y. (35).
- Ruppersberg, Miss Emma A., 842 South High St., Columbus, Ohio. (48). **B**
- *Rusby, Henry H., M. D., 115 West 68th St., New York, N. Y. (36). 1890. **G**
- Russak, Frank, 19 East 65th St., New York, N. Y. (50). **I**
- Russell, A. H., Lieut. Col. U. S. A., Chief Ordnance Officer, Div. of Philippines, Manila, P. I. (38). **D**
- *Russell, Frank, Ph. D., Bureau of American Ethnology, Washington, D. C. (45). 1897. **H**
- Russell, Herbert Edwin, Professor of Mathematics, University of Denver, University Park, Colo. (50). **A**
- *Russell, Prof. H. L., University of Wisconsin, Madison, Wis. (41). 1894. **G**
- *Russell, Israel C., University of Michigan, Ann Arbor, Mich. (25). 1882. **E**
- *Russell, James E., Dean of Teachers' College, West 120th St. New York, N. Y. (50). 1901. **H I**
- Russell, Hon. John Edwards, Leicester, Mass. (47). **I**

MEMBERS AND FELLOWS.

- *Rutter, Frank Roy, Ph. D., U. S. Dept. Agriculture, Washington, D. C. (47). 1900. **I**
- *Ryan, Harris J., Cornell University, Ithaca, N. Y. (38). 1890. **B**
- *Rydberg, Dr. Per Axel, N. Y. Botanical Garden, Bronx Park, New York, N. Y. (49). 1901. **G**
- Rynearson, Edward, Central High School, Pittsburg, Pa. (51). **F G**
- Sachs, B., M. D., 21 E. 65th St., New York, N. Y. (49).
- Sackett, Miss Eliza D., Cranford, N. J. (35). **F H**
- Sackett, Robert L., C. E., Professor of Applied Mathematics and Astronomy, Earlham College, Richmond, Ind. (50). **A**
- Sage, John H., Portland, Conn. (23). **F**
- Sager, Fred. Anson, Asst. Professor of Physics, University of Illinois, Urbana, Ill. (50). **B**
- *St. John, Prof. Charles E., 125 Elm St., Oberlin, Ohio. (46). 1900. **B**
- St. John, Howell W., P. O. Box 913, Hartford, Conn. (49). **I**
- Salathé Frederick, Ph. D., General Superintendent, Penna. Oil & Gas Co., Casper, Wyoming. (51). **C**
- *Salisbury, Prof. R. D., Chicago University, Chicago, Ill. (37). 1890. **B E**
- *Salmon, Daniel E., U. S. Dept. Agriculture, Washington, D. C. (31). 1885. **F**
- Sander, Dr. Enno, St. Louis, Mo. (27). **C**
- Sanderson, E. Dwight, Entomologist, Del. Coll. Agric. Exper. Station, Newark, Del. (50). **F**
- Sando, Will J., Manager International Steam Pump Co., 120 Liberty St., New York, N. Y. (51). **E**
- Sanford, E. C., Clark University, Worcester, Mass. (49). **H I**
- *Sanford, Fernando, Professor of Physics, Stanford University, Cal. (50). 1901. **B**
- Sardeson, Frederick William, Ph. D., Instructor in Geology, University of Minnesota, Minneapolis, Minn. (50). **E**
- Sargent, Asa Nathaniel, M. D., 116 Federal St., Salem, Mass. (51). **K**
- *Sargent, Dudley Allen, M. D., Director of the Hemenway Gymnasium, Harvard University, Cambridge, Mass. (47). 1899. **H**
- Satterfield, David Junkin, D. D., President of Scotia Seminary, Concord, N. C. (50). **I**
- Satterlee, F. LeRoy, M. D., 8 W. 18th St., New York, N. Y. (50). **K**
- *Saunders, A. P., Ph. D., Hamilton College, Clinton, N. Y. (48). 1900. **C**
- *Saunders, Charles E., Ph. D., Experimental Farm, Ottawa, Canada. (41). 1895. **C**
- Saunders, Edward W., M. D., 1635 S. Grand Ave., St. Louis, Mo. (51). **K**

MEMBERS AND FELLOWS.

- Saunders, F. A., Ph. D., Instructor in Physics, Syracuse University, Syracuse, N. Y. (48). **B**
- *Saunders, William, LL.D., F. R. S. C., F. L. S., Canadian Experimental Farms, Ottawa, Canada. (17). 1874. **F**
- Savage, Dr. W. L., Director of the Gymnasium of Columbia University, Columbia Univ., New York, N. Y. (51).
- *Saville, Marshall H., Amer. Mus. Nat. History, Central Park, New York, N. Y. (39). 1892. **H**
- Sawyer, Edward, Civil and Mechanical Engineer, Newton, Mass. (51). **D**
- Sayre, Miss Clara B., South Bethlehem, Pa. (50). **E H**
- *Sayre, Robert H., South Bethlehem, Pa. (28). 1899. **D**
- Scaife, Walter B., care A. W. Elford, Catania, Sicily. (49). **I**
- Scaife, William Lucien, 28th St., Pittsburg, Pa. (51). **B D**
- *SCHAEBERLE, J. M., 502 Second St., Ann Arbor, Mich. (34). 1886. **A**
- Schaeffer, Henri N. F., P. O. Box 676, Manchester, N. H. (46). **C**
- SCHAFER, CHAS., M. D., 1309 Arch St., Philadelphia, Pa. (29). **E F**
- SCHAFER, MRS. MARY TOWNSEND SHARPLESS, 1309 Arch St., Philadelphia, Pa. (38). **E F**
- *Schaffner, John H., Ohio State Univ., Columbus, Ohio. (48). 1899. **G**
- Scharar, Christian H., 2073 N. Main Ave., Scranton, Pa. (33). **A D E H**
- Scheffler, Frederick A., Mechanical and Electrical Engineer, Box 233, Glen Ridge, N. J. (50). **D**
- Schenck, Charles C., Ph. D., Instructor in Physics, Lehigh University, South Bethlehem, Pa. (51). **B**
- SCHERMERHORN, F. AUG., 61 University Place, New York, N. Y. (36).
- SCHERMERHORN, WM. C., 49 W. 23d St., New York, N. Y. (36).
- Schernikow, Ernest, P. O. Box 1191, New York, N. Y. (49).
- Schiaffino, Mariano L., Chief Electrical Engineer, "Campania de Luz de Guadalajara," Belen 2, Apartado 260, Guadalajara, Mexico. (50). **D**
- Schiedt, Richard Conrad, Professor of Biology, Franklin and Marshall College, Lancaster, Pa. (50). **F**
- Schieffelin, Eugene, 865 Madison Ave., New York, N. Y. (50).
- Schieren, Hon. Charles A., 405 Clinton Ave., Brooklyn, N. Y. (43). **C I**
- Schiertz, Ferdinand Alfred, Rosario Mines, Ltd., Guadalupe y Calvo, Estado de Chihuahua, Mexico. (50). **D E**
- Schiff, Jacob H., P. O. Box 1193, New York, N. Y. (49).
- Schirmer, Gustave, 117 E. 35th St., New York, N. Y. (49).
- Schlesinger, Frank, Observer, in charge of International Latitude Observatory, Ukiah, Cal. (51). **A**

MEMBERS AND FELLOWS.

- Schlichting, Emil, Analytical Chemist, 646 Broadway, Milwaukee, Wis. (50). **C**
- *Schlotterbeck, Julius O., Ann Arbor, Mich. (46). 1899. **G**
- Schmeckebier, Lawrence Frederick, Ph. D., U. S. Geol. Survey, Washington, D. C. (50). **E I**
- Schmid, Dr. H. Ernest, White Plains, N. Y. (25).
- Schmitt, A. Emil, M. D., 310 East 57th St., New York, N. Y. (50).
- K**
- Schmitt, Ewald, 2235 13th St. N.W., Washington, D. C. (51).
- Schobinger, John J, Morgan Park, Ill. (34). **B**
- *Schöney, L., M. D., 23 W. 135th St., New York, N. Y. (29). 1900.
- F**
- Schuette, J. H., Green Bay, Wis. (34). **B E F**
- Schultz, Carl H., 430-444 First Ave., bet. 25th and 26th Sts., New Yrk, N. Y. (29).
- *Schurman, Jacob Gould, LL.D., President Cornell University, Ithaca, N. Y. (49). 1901.
- Schuyler, Philip, Irvington-on-Hudson, N. Y. (49).
- Schwalbe, Carl, M. D., 1002 So. Olive St., Los Angeles, Cal. (51). **K**
- *Schwarz, E. A., U. S. Department of Agriculture, Washington, D. C. (29). 1895. **F**
- Schwatt, Isaac Joachim, Assistant Professor of Mathematics, University of Pennsylvania, Philadelphia, Pa. (51). **A**
- *Schweitzer, Prof. Paul, State Univ. of Missouri, Columbia, Mo. (24). 1877. **B C**
- Scott, Arthur Curtis, Kingston, R. I. (47).
- Scott, Prof. Arthur William, St. David's College, Lampeter, S. Wales, England. (46). **A B**
- *Scott, Charles F., Westinghouse Electric and Mfg. Co., Pittsburg, Pa. (48). 1900. **B**
- Scott, Martin P., M. D., Maryland Agric. College, College Park, Md. (31).
- Scott, William, Counsel for Penna. R.R. Co., 450 4th Ave., Pittsburg, Pa. (50). **I**
- Scott, W. M., State Entomologist, Atlanta, Ga. (50). **F**
- Scovell, M. A., Director and Chemist, Agricultural Experiment Station, Lexington, Ky. (35). **C**
- Scripture, Arthur M., Principal of High School, New Hartford, N. Y. (51). **D**
- *Scripture, E. W., Yale University, New Haven, Conn. (46). 1901.
- H**
- *SCUDDER, SAMUEL H., Cambridge, Mass. (13). 1874. **F**
- *Scul, Miss Sarah A., Smethport, Pa. (40). 1895. **H**
- Seal, Alfred Newlin, Ph. D., Professor of Chemistry, Girard College, Philadelphia, Pa. (50). **B C**
- *Seaman, W. H., Chemist, 1424 11th St. N.W., Washington, D. C. (23). 1874. **C F**

MEMBERS AND FELLOWS.

- Searing, Anna H., M. D., Escondido, Cal. (41). **G**
- *Searle, Prof. George M., St. Thomas College, Catholic University, Washington, D. C. (39). 1891. **A**
- Sears, Edward H., Collinsville, Conn. (50). **D I**
- Sears, Frederick Edmund, St. Paul's School, Concord, N. H. (47).
C E
- Sears, Henry Francis, Topsfield, Mass. (50).
- Seashore, Carl E., Univ. of Iowa, Iowa City, Iowa. (49). **H**
- Seawell, Benjamin Lee, Teacher of Biology, State Normal School, Warrensburg, Mo. (50). **F**
- Sebert, William F., 48 Strong Place, Brooklyn, N. Y. (41). **A E**
- *Sedgwick, William Thompson, Massachusetts Institute of Technology, Boston, Mass. (47). 1898. **F G**
- *See, Horace, 1 Broadway, New York, N. Y. (34). 1886. **D**
- See, James W., M. E., Opera House, Hamilton, Ohio. (51). **D**
- *See, Prof. T. J. J., U. S. Naval Observatory, Washington, D. C. (48). 1901. **A**
- *Selby, Augustine Dawson, Agric. Exper. Station, Wooster, Ohio. (44). 1900. **G**
- Seligman, Isaac N., Mills Building, New York, N. Y. (49).
- Sellers, James Freeman, Prof. of Chemistry, Mercer University, Macon, Ga. (50). **C**
- Sellers, William, 1600 Hamilton St., Philadelphia, Pa. (51).
- Sercombe, Parker H., Banker, 1a Calle San Francisco, No. 8, City of Mexico, Mexico. (51). **H**
- Serrell, Gen. Edward Wellman, C. E., Forest Ave., West New Brighton, N. Y. (50). **B C D**
- Sessinghaus, Gustavus, E. M., 1360 Columbine St., Denver, Colo. (50). **E**
- Sever, George F., Columbia University, New York, N. Y. (49). **B**
- Seymour, A. T., 512 S. 1st Ave., Mt. Vernon, N. Y. (47).
- *Seymour, Paul Henry, 215 East 61st St., Chicago, Ill. (44). 1896.
C
- Shafer, John A., Custodian, Carnegie Museum, Pittsburg, Pa. (51).
G
- Shaffner, Samuel C., Supt. Electric Lighting Co., Mobile, Ala. (50).
C D
- Shantz, Homer LeRoy, Colorado Springs, Colo. (50). **F**
- Sharp, Charles Cutler, C. E., E. M., President Raven Coal and Coke Co., Boomer, W. Va. (50). **D E**
- *Sharp, Dr. Clayton H., Box 114, Newark, N. J. (45). 1897.
- Sharpe, Benjamin F., Greenwich, N. Y. (50). **B**
- Sharpe, Richard W., 732 Emerson St., Evanston, Ill. (51). **F**
- Sharples, Philip Price, A. B., 22 Concord Ave., Cambridge, Mass. (47). **C**
- *Sharples, Stephen P., 13 Broad St., Boston, Mass. (29). 1884. **C**

MEMBERS AND FELLOWS.

- *SHATTUCK, FREDERICK C., M. D., Professor Clinical Medicine, Harvard Medical College, Boston, Mass. (50). 1901. **F K**
- *Shattuck, George Burbank, Johns Hopkins University, Baltimore, Md. (47). 1899. **E**
- Shattuck, Samuel Walker, Professor of Mathematics, University of Illinois, Champaign, Ill. (50). **A**
- Shaw, Edwin C., M. E., 104 Park St., Akron, Ohio. (50). **D**
- Shaw, Henry Lyman, M. D., 19 Commonwealth Ave., Boston, Mass. (51). **K**
- Shaw, Walter Robert, Ph. D., Prof. of Botany and Entomology, Agric. & Mech. College, Stillwater, Okla. Ter. (47). **F G**
- Shaw, Wilson A., Cashier, Merchants and Manuf. National Bank, Norwood Ave., cor. Forbes Ave., Pittsburg, Pa. (50). **I**
- SHEAFER, A. W., Pottsville, Pa. (28).
- *Shear, Cornelius L., U. S. Dept. Agriculture, Washington, D. C. (49). 1901. **G**
- Shedd, John C., Prof. of Physics, Colorado Springs, Colo. (50). **A B**
- Shedd, Solon, Professor of Geology and Mining, Agricultural College, Pullman, Wash. (50). **E**
- Sheffield, George St. John, Twin Elms Farm, Attleborough, Mass. (50).
- Sheldon, John Lewis, University of Nebraska, Lincoln, Nebraska. (50). **G**
- Sheldon, Mrs. J. M. Arms, 18 W. Cedar St., Boston, Mass. (44). **F**
- *Sheldon, Samuel, A. M., Ph. D., Polytechnic Institute, Brooklyn, N. Y. (42). 1894. **B**
- *Shelton, Edward M., 2728 Boylston Ave., Seattle, Wash. (32). 1892. **F**
- SHEPHERD, MISS ELIZABETH, 253 W. 128th St., New York, N. Y. (39).
- Shepherd, Frank I., University P. O., Los Angeles, Cal. (48). **C**
- Sheppard, Morris, Lawyer and Actuary, Texarkana, Texas. (51).
- Sherman, Franklin, Jr., State Entomologist, Raleigh, N. C. (50). **F**
- Sherman, Lewis, M. D., 448 Jackson St., Milwaukee, Wis. (50). **F K**
- Sherwood-Dunn, B., M. D., 26 Broadway, New York, N. Y. (51). **K**
- Shiland, Andrew, Jr., 262 W. 78th St., New York, N. Y. (50).
- *Shimer, Porter W., E. M., Ph. D., Easton, Pa. (38). 1889. **C**
- Shinn, Charles Howard, Inspector of Experiment Stations, University of California, Niles, Cal. (50). **F G**
- Shrader, John Clinton, M. D., LL.D., President Iowa State Board of Health, Iowa City, Iowa. (50). **F K**
- Shropshire, Walter, M. D., Yoakum, Texas. (50). **F K**
- Shultz, Charles S., Hoboken, N. J. (31). **F**
- Shurley, E. L., M. D., 32 Adams Ave., West Detroit, Mich. (51). **K**
- Shute, D. K., M. D., 1101 13th St. N.W., Washington, D. C. (50). **F I K**

MEMBERS AND FELLOWS.

- Sickels, I., M. D., 17 Lexington Ave., New York, N. Y. (50). **F K**
- Siemon, Rudolf, 22 East Jefferson St., Fort Wayne, Ind. (40). **A F**
- *Sigsbee, Charles D., Captain U. S. N., Navy Department, Washington, D. C. (28). 1882. **D E**
- Silloway, Perley Milton, Principal of High School, Lewiston, Montana. (51). **F**
- Silvester, Richard W., President Maryland Agricultural College, College Park, Md. (50). **G**
- *Simon, Dr. Wm., 1348 Block St., Baltimore, Md. (29). 1895. **C**
- *Simonds, Prof. Frederic W., University of Texas, Austin, Texas. (25). 1888. **E F**
- Simpson, Friench, Jr., Columbus, Texas. (50). **F H K**
- Simpson, John Crayke, M. D., Govt. Hospital for the Insane, Washington, D. C. (51). **K**
- Singer, George Park, 545 W. Church St., Lock Haven, Pa. (50). **B**
- Sirrine, F. Atwood, 110 New York Ave., Jamaica, N. Y. (44). **F**
- Skeel, Frank D., M. D., 58 East 25th St., New York, N. Y. (50). **F K**
- Skiff, F. J. V., Director, Field Columbian Museum, Chicago, Ill. (43).
- *Skinner, Aaron Nichols, U. S. Naval Observatory, Washington, D. C. (40). 1893. **A**
- Skinner, Clarence A., Ph. D., University of Nebraska, Lincoln, Neb. (48). **B**
- Skinner, Clarence Edward, M. D., Physician in charge, The Newhope Hot Air Sanitarium, 67 Grove St., New Haven, Conn. (51). **K**
- Skinner, Henry, M. D., 716 N. 20th St., Philadelphia, Pa. (47). **F K**
- Skinner, James Dudley, 823 E. 14th Ave., Denver, Colo. (50). **B D**
- Slade, Elisha, Somerset, Mass. (29). **F**
- Slagle, Robert Lincoln, Ph. D., President, State School of Mines, Rapid City, S. D. (50). **C E**
- Slichter, Charles S., Professor of Applied Mathematics, University of Wisconsin, Madison, Wis. (51). **A**
- *Slingerland, Mark Vernon, Assistant Professor of Economic Entomology, Cornell University, Ithaca, N. Y. (50). 1901. **F**
- Slocum, Chas. E., M. D., Defiance, Ohio. (34). **F G H**
- Slocum, Frederick, Ph. D., Ladd Observatory, Providence, R. I. (47).
- Slonaker, James Rollin, University of Chicago, Chicago, Ill. (49). **F**
- *Slosson, Edwin E., Professor of Chemistry, University of Wyoming, Laramie, Wyoming. (50). 1901. **C**
- Small, John Kunkel, N. Y. Botanical Garden, Bronx Park, New York, N. Y. (44). **G**

MEMBERS AND FELLOWS.

- Smallwood, Martin, 32 Gorham St., Cambridge, Mass. (50). **E F**
- Smillie, Thomas W., U. S. National Museum, Washington, D. C. (40). **F**
- *Smith, Alexander, Ph. D., University of Chicago, Chicago, Ill. (40). 1892. **C**
- Smith, Allen J., M. D., School of Medicine, University of Texas, Galveston, Tex. (47). **H**
- Smith, Mrs. Annie Morrill, 78 Orange St., Brooklyn, N. Y. (49). **G**
- Smith, Arthur, 152 Broadway, New York, N. Y. (50). **G**
- Smith, Arthur George, Assistant Professor of Mathematics, State University, Iowa City, Iowa. (50). **A**
- *Smith, Prof. A. W., Case School of Applied Science, Cleveland, Ohio. (47). 1900. **C**
- Smith, Arthur Whitmore, Prof. of Electricity, University of Mississippi, University, Miss. (44). **B**
- *Smith, Charles J., 35 Adelbert St., Cleveland, Ohio. (32). 1885. **A B**
- *Smith, Prof. Edgar F., University of Pennsylvania, Philadelphia, Pa. (33). 1891. **C**
- *Smith, Erastus G., Ph. D., Director Beloit Sanitary Laboratory, Beloit, Wis. (34). 1887. **C**
- *Smith, Ernest Ellsworth, 26 East 29th St., New York, N. Y. (43). 1898. **F K**
- *Smith, Erwin F., U. S. Dept. Agriculture, Washington, D. C. (34). 1890. **G**
- Smith, Eugene, C. E., 317 Washington St., Hoboken, N. J. (50). **D**
- *Smith, Prof. Eugene Allen, University, Ala. (20). 1877. **C E**
- Smith, Felix Ezell, Superintendent of Schools, Victoria, Texas. (51). **F G**
- *Smith, Frank, University of Illinois, Urbana, Ill. (49). 1900. **F**
- *Smith, Harlan I., Amer. Mus. Nat. History, Central Park, New York, N. Y. (41). 1896. **H**
- *Smith, Prof. Harold B., Polytechnic Institute, Worcester, Mass. (43). 1898. **D**
- Smith, Harvey F., Attorney at Law, Clarksburg, W. Va. (50). **I**
- Smith, Herbert S. S., Professor of Applied Mechanics, Princeton University, Princeton, N. J. (29). **D**
- Smith, Miss J. Angelina, Hopedale, Mass. (45). **E**
- Smith, J. C., 131 Carondelet St., New Orleans, La. (48).
- Smith, James Hervey, 217 North Central Ave., Chicago, Ill. (40).
- *Smith, James Perrin, Ph. D., Asst. Prof. of Paleontology, Stanford University, Cal. (37). 1894. **C E**
- *Smith, Jared G., Hawaiian Experiment Station, Honolulu, T. H. (47). 1901. **G**
- SMITH, MISS JENNIE M., 803 Arch St., Allegheny, Pa. (50). **A F**
- *Smith, John B., Ph. D., Rutgers College, New Brunswick, N. J. (32). 1884. **F**

MEMBERS AND FELLOWS.

- Smith, Joseph R., M. D., LL.D., Colonel and Assistant Surgeon General, U. S. A., 2300 De Lancey St., Philadelphia, Pa. (43).
 SMITH, MISS MATILDA H., 803 Arch St., Allegheny, Pa. (50). **A**
 Smith, Matthew Mann, M. D., Austin, Texas. (50). **F K**
 Smith, Philip Sidney, 20 Trowbridge St., Cambridge, Mass. (47).
E
 *SMITH, Q. CINCINNATUS, M. D., 617 Colorado St., Austin, Texas. (26). 1881. **K**
 Smith, Thomas A., Professor of Mathematics and Physics, Beloit College, Beloit, Wis. (50). **A B**
 Smith, T. Guilford, Civil Engineer, Regent University, State of New York, Buffalo, N. Y. (50). **D**
 *Smith, William Benjamin, Professor of Mathematics, Tulane University, New Orleans, La. (50). 1901. **A**
 Smith, Wm. Lincoln, Consulting Electrical and Illuminating Engineer, Concord, Mass. (47). **D**
 Smith, William Sidney Tangier, Ph. D., U. S. Geological Survey, Washington, D. C. (50). **E**
 Smith, William T., M. D., Prof. of Physiology and Dean of Dartmouth Medical School, Hanover, N. H. (51). **K**
 *Smock, Prof. John Conover, State Geologist, Trenton, N. J. (23). 1879. **E**
 Smoot, Edgar Kenneth, Engineer and Contractor, 1511 Rhode Island Ave. N.W., Washington, D. C. (51). **D**
 Smyth, Bernard Bryan, Librarian and Secretary of the Academy of Science, Topeka, Kansas. (51). **G**
 *Smyth, C. H., Jr., Clinton, N. Y. (38). 1894. **E**
 Sneath, E. Hershey, Professor of Philosophy, Yale University, New Haven, Conn. (51). **H**
 Snedaker, James Angus, Mining Engineer, 721-722 Equitable Bldg., Denver, Colo. (50). **D J**
 Snelling, Charles Mercer, Junior Professor of Mathematics, University of Georgia, Athens, Ga. (50). **A**
 Sneve, Haldor, M. D., Lowry Arcade, St. Paul, Minn. (51). **K**
 Snook, H. Clyde, Professor of Physics and Chemistry, Allegheny College, Meadville, Pa. (50). **B C**
 *Snow, Benjamin W., 518 Wisconsin Ave., Madison, Wis. (35). 1889. **B**
 *Snow, F. H., Professor of Natural History, University of Kansas, Lawrence, Kan. (29). 1881. **E F**
 *Snyder, Prof. Harry, 2090 Dooley Ave., Saint Anthony Park, Minn. (44). 1897. **C**
 Snyder, Miss Lillian, Lafayette, Ind. (47). **G**
 *Snyder, Prof. Monroe B., Philadelphia Astronomical Observatory, Philadelphia, Pa. (24). 1882. **A B**
 Snyder, Nathaniel Marion, Electrical Engineer, Gering, Neb. (50). **B D**

MEMBERS AND FELLOWS.

Snyder, William E., M. E., 510 E. North Ave., Allegheny, Pa. (51).

D

Snyder, Zachariah Xenophon, President State Normal School, Greeley, Colo. (50). **F**

Solotaroff, H., M. D., 251 East Broadway, New York, N. Y. (47). **H**

Soper, George A., Ph. D., 29 Broadway, New York, N. Y. (46). **C**

*Soule, R. H., 917 Seventh Ave., New York, N. Y. (33). 1886. **D**

*Soule, William, Ph. D., Mount Union Coll., Alliance, Ohio. (33).

1899. **B C E**

Southall, James P. C., Professor of Physics, Alabama Polytechnic Institute, Auburn, Ala. (51). **B**

Souvielle, Mathieu, M. D., Box 355, Jacksonville, Fla. (36). **B E F**

Souvielle, Mrs. Mathieu, Box 355, Jacksonville, Fla. (24). **A B F**

Sowers, David Wood, Supt. Buffalo Branch N. Y. Elec. Veh. Trans. Co., 179 N. Pearl St., Buffalo, N. Y. (51). **D**

*Spalding, Frederick P., Professor of Civil Engineering, Univ. of Missouri, Columbia, Mo. (46). 1899. **D**

Spalding, Volney M., Ph. D., Professor of Botany, University of Michigan, Ann Arbor, Mich. (51). **G**

Spangler, Harry Allen, M. D., Carlisle, Pa. (51). **K**

Spaulding, Edward G., Ph. D., College of the City of New York, New York, N. Y. (50). **I**

Spencer, John Campbell, M. D., Medical Department, University of California, San Francisco, Cal. (50). **F K**

*Spencer, Prof. J. William, 152 Bloor St., Toronto, Canada. (28). 1882. **E**

*SPENZER, JOHN G., M. D., 116 Rose Bldg., Cleveland, Ohio. (37). 1895. **C**

Sperry, Elmer A., Electrical Engineer, 366-388 Massachusetts Ave., Buffalo, N. Y. (51). **D**

*Speyers, Clarence Livingston, Professor of Physical Chemistry, Rutgers College, New Brunswick, N. J. (50). 1901. **C**

Spicer, Walter E., M. D., 312 West 51st St., New York, N. Y. (51).

K

Spiegelhalter, Dr. Joseph, 2166 Lafayette Ave., St. Louis, Mo. (47). **E**

*Spinney, L. B., Iowa State College, Ames, Iowa. (42). 1897. **B**

Spofford, Paul N., P. O. Box 1667, New York, N. Y. (36).

Spohn, Arthur Edward, M. D., Corpus Christi, Texas. (50). **F K**

Sprague, C. C., 1900 Locust St., St. Louis, Mo. (50).

SPRAGUE, C. H., Malden, Mass. (29).

*Springer, Dr. Alfred, 312 E. 2d St., Cincinnati, Ohio. (24). 1880. **C**

Springsteen, Harry W., Case School of Applied Science, Cleveland, Ohio. (49). **A B**

Squibb, Charles F., Bernardsville, N. J. (43).

Squibb, Edward Hamilton, M. D., P. O. Box 760, Brooklyn, N. Y.

(41). **F K**

MEMBERS AND FELLOWS.

- Stackpole, Morrill D., Genl. Supt. Overland Gold Mining Co., Sunshine, Utah. (50). **E**
- Stahley, George D., M. D., Gettysburg, Pa. (47). **F G**
- Stanley, William, Great Barrington, Mass. (50).
- STANTON, FRANK McMILLAN, E. M., Agent of Atlantic, Baltic and Central Mining Co's Atlantic Mine, Mich. (51). **D E**
- Stanton, John R., 11 and 13 William St., New York, N. Y. (49).
- Stanton, Robert Brewster, Civil and Mining Engineer, Sewickley, Pa. (51). **D**
- Stanton, Timothy W., Paleontologist, U. S. Geological Survey, Washington, D. C. (50). **E**
- Starks, Edwin Chapin, Curator and Instructor, Department of Zoology, Stanford University, Cal. (50). **F**
- Starr, Elmer G., M. D., Clinical Prof. of Ophthalmology, University of Buffalo, Buffalo, N. Y. (50). **F K**
- *Starr, Frederick, Ph. D., University of Chicago, Chicago, Ill. (36). 1892. **E H**
- *Starr, M. Allen, M. D., 5 West 54th St., New York, N. Y. (50). 1901. **K**
- Starrett, M. G., 349 W. 85th St., New York, N. Y. (49).
- *Stearns, Robert E. C., Ph. D., 1025 East Eighteenth St., Los Angeles, Cal. (18). 1874. **F**
- Stearns, Thomas B., Mining Engineer, Denver, Colo. (50). **D E**
- Stearns, Theron C., M. D., Consulting Chemist, 44 Montgomery St., Jersey City, N. J. (49).
- Stebbins, Miss Fannie A., 480 Union St., Springfield, Mass. (44). **F G**
- Steensland, Halbert Severin, M. D., College of Medicine, Syracuse University, Syracuse, N. Y. (50). **F K**
- Steer, Justin, M. D., Medical Department, Washington University, St. Louis, Mo. (50). **F K**
- *Steiger, George, Chemical Laboratory, U. S. Geol. Survey, Washington, D. C. (40). 1901. **B C E**
- Stein, Dr. Simon G., Muscatine, Iowa. (43).
- Steinbach, Lewis W., M. D., 1309 N. Broad St., Philadelphia, Pa. (51). **K**
- Steiner, Roland, Ph. D., Grovetown, Ga. (48). **H**
- *Steinmetz, Charles Proteus, General Electric Co., Schenectady, N. Y. (40). 1895. **B**
- Stellwagen, Thos. C., M. D., Prof. Physiology, Philadelphia Dental College, 1328 Chestnut St., Philadelphia, Pa. (51). **K**
- Stephens, Henry Matthew, Professor of Biology, Dickinson College, Carlisle, Pa. (50). **F G**
- *STEPHENS, W. HUDSON, Lowville, N. Y. (18). 1874. **E H**
- Stern, Philip Kossuth, Consulting Mechanical and Electrical Engineer, 130 Fulton St., New York, N. Y. (50). **B D**

MEMBERS AND FELLOWS.

- Sternberg, Charles Hazelius, Lawrence, Kansas (50). **E F**
- *Sternberg, George M., M. D., LL.D., Surgeon-General, U. S. A., War Department, Washington, D. C. (24). 1880. **F**
- Sterne, Albert E., M. D., "Norways," Indianapolis, Ind. (51). **K**
- Stetson, George R., 1441 Mass. Ave. N.W., Washington, D. C. (49). **H I**
- Steuart, Arthur, 951 Equitable Building, Baltimore, Md. (48). **C**
- Stevens, Cyrus Lee, M. D., Secy. of the Medical Society of the State of Pa., Athens, Bradford, Co., Pa. (51). **K**
- *Stevens, Frank L., Ph. D., Prof. of Biology, College of Agric. and Mech. Arts, West Raleigh, N. C. (44). 1899. **G**
- Stevens, Frederick W., Department of Physics, Lake Forest University, Lake Forest, Ill. (50). **B**
- Stevens, George T., M. D., 22 East 46th St., New York, N. Y. (28). **B F**
- Stevens, James Franklin, M. D., 1136 O St., Lincoln, Neb. (50). **F H K**
- *Stevens, James S., Orono, Me. (48). 1900. **B**
- *Stevens, Prof. W. LeConte, Washington and Lee University, Lexington, Va. (29). 1882. **B**
- Stevenson, Francis L., 79 Lincoln Ave., Chicago, Ill. (47). **D**
- *Stevenson, Prof. John J., University Heights, New York, N. Y. (36). 1888. **E**
- *Stevenson, Mrs. Matilda C., Bureau of American Ethnology, Washington, D. C. (41). 1893. **H**
- Stevenson, Robert, Consulting Civil and Mining Engineer, P. O. Box 2214, San Francisco, Cal. (50). **D E**
- Stewart, Douglas, Assistant to Director Carnegie Museum, Pittsburg, Pa. (50). **E**
- Stewart, D. D., M. D., 1429 Walnut St., Philadelphia, Pa. (51). **K**
- *Stewart, Fred. Carlton, Botanist, N. Y. Agric. Exper. Station, Geneva, N. Y. (44). 1901. **G**
- Stewart, J. Clark, M. D., 1628 5th Ave., So. Minneapolis, Minn. (51). **K**
- Stewart, James Henry, Director of W. Va. Agric. Exper. Station, Morgantown, W. Va. (50). **E**
- *Stewart, Oscar M., Assist. Professor of Physics, University of Missouri, Columbia, Mo. (46). 1900. **B**
- Stewart, Ralph Chambers, 1031 Spruce St., Philadelphia, Pa. (51). Stickney, Gardner P., care Oliver C. Fuller & Co., Milwaukee, Wis. (44). 1901. **H**
- *Stieglitz, Dr. Julius, University of Chicago, Chicago, Ill. (39). 1895. **C**
- Stieringer, Luther, 129 Greenwich St., New York, N. Y. (50).
- *Stiles, Charles W., Ph. D., Dept. of Agric., Washington, D. C. (40). 1892. **F**

MEMBERS AND FELLOWS.

- Stiles, George M., M. D., Conshohocken, Pa. (51). **K**
- Still, George A., 1428 Locust St., Des Moines, Iowa. (50). **C**
- Stillhamer, Arthur G., 5809 Jackson Ave., University of Chicago, Chicago, Ill. (50). **B**
- Stillman, Prof. John M., Stanford University, California. (41).
- Stillwell, Lewis Buckley, Park Row Building, New York, N. Y. (50). **B D**
- *Stine, Prof. W. M., Swarthmore College, Swarthmore, Pa. (37). 1900. **A C**
- Stingley, Miss Lela Lorena, University of Denver, University Park, Colo. (50). **A**
- Stockton, Charles G., M. D., 436 Franklin St., Buffalo, N. Y. (51). **K**
- *Stockwell, John N., 1008 Case Ave., Cleveland, Ohio. (18). 1875. **A**
- Stoddard, George Howland, M. E., 457 Marlborough St., Boston, Mass. (51). **D**
- Stokes, Anson Phelps, 47 Cedar St., New York, N. Y. (50). **I**
- *Stokes, Henry Newlin, Ph. D., U. S. Geol. Survey, Washington, D. C. (38). 1891. **C E**
- Stone, Alfred H., Greenville, Miss. (51).
- Stone, Prof. George E., Mass. Agricultural College, Amherst, Mass. (48). **G**
- Stone, Miss Isabelle, Ph. D., Instructor in Physics, Vassar College, Poughkeepsie, N. Y. (50). **B**
- Stone, Julius F., Columbus, Ohio. (48).
- Stone, Lincoln R., M. D., Newton, Mass. (31).
- Stone, Mason A., 161 Broadway, New York, N. Y. (49).
- *Stone, Ormond, Director Leander McCormick Observatory, University of Virginia, Charlottesville, Va. (24). 1876. **A**
- Storer, Norman Wilson, care Westinghouse E. & M. Co., Pittsburgh, Pa. (50). **D**
- *Story, Prof. Wm. E., Clark University, Worcester, Mass. (29). 1881. **A**
- *Stowell, Prof. T. B., Potsdam, N. Y. (28). 1885. **F**
- *Stradling, George F., Ph. D., 4114 Parkside Ave., Philadelphia, Pa. (41). 1900. **B**
- Strong, Edwin A., Department of Physical Sciences, State Normal School, Ypsilanti, Mich. (46). **B**
- Strong, Frederick F., M. D., 176 Huntington Ave., Boston, Mass. (47). **C F**
- Strong, Frederick G., Box 959, Hartford, Conn. (50). **D**
- *Strong, Wendell M., 32 Nassau St., New York, N. Y. (44). 1899. **A B**
- Stubbert, J. Edward, M. D., 25 E. 45th St., New York, N. Y. (51). **K**
- *Stubbs, W. C., Ph. D., Director, State Experiment Station, Audubon Park, New Orleans, La. (40). 1901. **F**

MEMBERS AND FELLOWS.

- Stump, James A., Instructor in Physics, Agricultural College, Fort Collins, Colo. (50). **B**
- *Sturgis, Wm. C., 242 Prospect St., New Haven, Conn. (40). 1892. **G**
- Sullivan, J. A., 308 Main St., Malden, Mass. (27). **A**
- Summers, Henry E., Professor of Zoology, State College, Ames, Iowa. (50). **F**
- Sumner, Francis B., Ph. D., Instructor in Natural History, College of the City of New York. (51). **F**
- Surface, Harvey Adam, Professor of Zoology, Penna. State College, State College, Pa. (50). **F**
- Sutton, Jasper G., M. D., Rushsylvania, Ohio. (48). **F K**
- Sutton, William John, Geologist, Esquimalt and Nanaimo Ry. Co., Victoria, B. C. (50). **E**
- Sutton, W. S., Professor of Science and Art of Education, University of Texas, Austin, Texas. (50). **I**
- Swartzel, Karl D., Department of Mathematics, State University, Columbus, Ohio. (48). **A**
- Sweet, Henry N., 50 Beacon St., Boston, Mass. (40). **D H**
- Swensson, Emil, C. E., 5511 Hays St., Pittsburg, Pa. (51). **D**
- Swezey, Goodwin D., Professor of Astronomy and Meteorology, University of Nebraska, Lincoln, Neb. (50). **A**
- *Swingle, Walter T., U. S. Dept. Agriculture, Washington, D. C. (40). 1892. **G**
- Swope, Gerard, Manager of the Western Electric Co., 810 Spruce St., St. Louis, Mo. (51). **B D**
- TAFT, ELIHU B., Burlington, Vt. (36). **H**
- Taggart, Rush, 319 West 75th St., New York, N. Y. (49).
- *Tainter, Charles Sumner, care Am. Security and Trust Co., 1405 G St. N.W., Washington, D. C. (29). 1881. **A B D**
- Tainter, Frank Stone, Civil Engineer, Far Hills, N. J. (51). **D**
- *Talbot, Henry P., Mass. Institute of Technology, Boston, Mass. (44). 1896. **C**
- Talbot, Miss Mignon, Teacher of Physical Geography, East High School, 640 Franklin Ave., Columbus, Ohio. (51). **E**
- Talbott, Mrs. Laura Osborne, 1445 Huntington Place, Washington, D. C. (36). **F G I**
- Tallman, William Duane, Professor of Mathematics, State College, Bozeman, Mont. (50). **A**
- TALMAGE, JAMES EDWARD, Ph. D., Professor of Geology, University of Utah, Salt Lake City, Utah. (50). **E**
- Tandberg, John P., Instructor in Physics and Chemistry, St. Olaf College, Northfield, Minn. (50). **B C**
- *TANNER, PROF. JOHN HENRY, 7 Central St., Ithaca, N. Y. (47). 1899. **A B**
- *Tarr, Ralph Stockman, Cornell University, Ithaca, N. Y. (49). 1901. **E**

MEMBERS AND FELLOWS.

- Tatlock, John, Jr., 32 Nassau St., New York, N. Y. (50).
- Taussig, James, Grand Avenue Hotel, St. Louis, Mo. (50). **I**
- *Taylor, Alonzo Englebert, Professor of Pathology, University of California. Residence 1809 Broadway, San Francisco, Cal. (50). 1901. **C K**
- Taylor, Edward B., Pittsburg, Pa. (50). **D**
- Taylor, Edward Randolph, Penn Yan, N. Y. (39). **C**
- Taylor, Edward Wyllys, M. D., Harvard Medical School, Boston, Mass. (50). **K**
- *Taylor, Frank B., 391 Fairfield Ave., Fort Wayne, Ind. (39). 1897.
- Taylor, Henry L., 60 W. 55th St., New York, N. Y. (49).
- Taylor, H. Longstreet, M. D., 75 Lowry Arcade, St. Paul, Minn. (51). **K**
- Taylor, J. Erskine, M. D., Rockland, Pa. (51). **K**
- Taylor, James Landon, M. D., Wheelersburg, Ohio. (51). **K**
- *Taylor, James M., Colgate University, Hamilton, N. Y. (33). 1901. **A D**
- Taylor, Lewis H., M. D., 83 S. Franklin St., Wilkes-Barre, Pa. (51). **K**
- Taylor, Robert S., Box 2019, Fort Wayne, Ind. (39).
- Tays, Eugene Aug. Hoffman, C. E., E. M., Manager Anglo-Mexican Mining Co., San José de Gracia, Sinaloa, Mexico. (50). **D E**
- Teeters, Wilber John, State University, Iowa City, Iowa. (50). **C F K**
- Terrell, Arthur Davis, 624 E. Madison St., Iola, Kansas. (51). **C**
- *Tesla, Nikola, LL.D., 55 W. 27th St., New York, N. Y. (43). 1895. **B**
- Thaw, Benjamin, President Hecla Coke Co., Morewood Place, Pittsburg, Pa. (50). **A D**
- Thaw, Mrs. William, Box 1086, Pittsburg, Pa. (41). **H**
- *Thaxter, Roland, Ph. D., Professor of Cryptogamic Botany, Harvard University, Cambridge, Mass. (50). 1901. **G**
- Thayer, Harry Stanley, Boulder, Colo. (50). **C**
- Thaisen, Clement F., M. D., 172 Washington Ave., Albany, N. Y. (51). **K**
- Thelberg, Elizabeth B., M. D., Resident Physician and Professor of Physiology and Hygiene, Vassar College, Poughkeepsie, N. Y. (50). **F K**
- Thiemann, Hermann, Manchester, Mass. (50). **G**
- *Thom, Charles, Instructor in Botany, University of Missouri, Columbia, Mo. (50). 1901. **G**
- *Thomas, Benjamin F., Professor of Physics, State University, Columbus, Ohio. (29). 1882. **A B**
- Thomas, George T., M. D., Rogers, Texas. (50). **F K**
- Thomas, Jerome B., Captain and Assistant Surgeon, U. S. V., care Chief Surgeon, Manila, P. I. (51). **K**

MEMBERS AND FELLOWS.

- *Thomas, Prof. M. B., Crawfordsville, Ind. (41). 1894. **G**
- Thompson, Alton H., 721 Kansas Ave., Topeka, Kan. (33). **H**
- Thompson, Miss Anna F., P. O. Box 32, Summit, N. J. (49).
- Thompson, Hugh L., Consulting Mechanical Engineer, Waterbury, Conn. (51). **D**
- Thompson, James E., New Carlisle, Ohio. (48).
- Thompson, James Edwin, 3224 Broadway, Galveston, Texas. (50).
- Thompson, J. L., M. D., 22 West Ohio St., Indianapolis, Ind. (39). **F**
- *Thompson, Joseph Osgood, Amherst, Mass. (41). 1893.
- Thompson, Robert M., 99 John St., New York, N. Y. (49).
- Thompson, Rev. Walter, D. D., Garrison-on-Hudson, N. Y. (49).
- Thompson, William, Mining, Metallurgical and Mechanical Engineer, Rossland Great Western Mines, Ltd., Rossland, B. C. (50). **D E**
- Thompson, W. Gilman, M. D., 34 E. 31st St., New York, N. Y. (50). **F K**
- *Thomson, Elihu, Swampscott, Mass. (37). 1888. **B**
- *Thomson, Wm., M. D., 1426 Walnut St., Philadelphia, Pa. (33). 1885. **B**
- Thornber, John J., Botanist, Agr. Exper. Station, Tucson, Arizona. (50). **G**
- *Thornburg, Charles L., Lehigh Univ., S. Bethlehem, Pa. (44). 1897. **A**
- *Thorndike, E. L., Ph. D., Adjunct Prof. of Genetic Psychology, Columbia Univ., New York, N. Y. (49). 1901. **H I K**
- THORNE, MRS. PHOEBE ANNA, 558 Madison Ave., New York, N. Y. (50).
- Thorne, Samuel, Jr., 55 Liberty St., New York, N. Y. (49).
- *Thruston, Gates Phillips, Nashville, Tenn. (38). 1890. **H**
- *Thruston, R. C. Ballard, Ballard & Ballard Co., Louisville, Ky. (36). 1896. **E**
- *Thurston, Prof. R. H., Sibley College, Cornell University, Ithaca, N. Y. (23). 1875. **D**
- Tibbals, George Attwater, 148 Milton St., Brooklyn, N. Y. (51).
- Tiffany, L. C., 27 E. 72d St., New York, N. Y. (50).
- *Tight, Prof. William George, Albuquerque, N. M. (39). 1900. **E**
- Tilley, Charles Edward, Teacher of Physics and Chemistry, Hope Street High School, Providence, R. I. (50). **B C**
- Tilson, P. S., Associate Professor of Chemistry, A. and M. College, College Station, Tex. (50). **C**
- Tilton, John Littlefield, Simpson College, Indianola, Iowa. (50). **E**
- Tingle, J. Bishop, Illinois College, Jacksonville, Ill. (50). **C**
- Titchener, E. B., Professor of Psychology, Cornell University, Ithaca, N. Y. (51). **K**
- *Tittmann, Otto H., Supt. U. S. C. and G. Survey, Washington. D. C. (24). 1888. **A**

MEMBERS AND FELLOWS.

- Titus, E., Jr., 10 E. 70th St., New York, N. Y. (50).
 Titus, E. S. G., Natural History Bldg., University of Illinois, Urbana, Ill. (50). **F**
 Todd, Albert M., Kalamazoo, Mich. (37). **C**
 *Todd, Prof. David P., Director Lawrence Observatory, Amherst, College, Amherst, Mass. (27). 1881. **A B D**
 *Todd, Prof. James E., State Univ., Vermilion, S. Dak. (22). 1886. **E F**
 Todd, J. H., M. D., Christmas Knoll, Wooster, Ohio. (48).
 Todd, William J., M. D., Mt. Washington, Baltimore, Md. (51). **K**
 Tolman, Rev. Marcus Alden, 123 S. High St., Bethlehem, Pa. (50).
I
 Tompkins, Stonewall, M. E., 1602 McKinney Ave., Houston, Tex. (51). **D**
 Tonnele, Theodore, Metallurgical Engineer, 919 College Ave., Pittsburg, Pa. (50). **E**
 Tooker, William Wallace, Sag Harbor, N. Y. (43). **H**
 Toothe, William, Madison, N. J. (49).
 Totman, David M., M. D., 303 Montgomery St., Syracuse, N. Y. (50). **K**
 Tower, Olin F., Ph. D., Instructor in Chemistry, Adelbert College, Cleveland, Ohio. (50). **C**
 Towle, William Mason, State College, Pa. (44). **D**
 Townsend, Charles O., U. S. Dept. Agriculture, Washington, D. C. (46). **G**
 Townson, Andrew J., President Board of Education, Granite Building, Rochester, N. Y. (50). **I**
 Tracy, Edward A., M. D., 353 Broadway, S. Boston, Mass. (51). **K**
 *Tracy, Samuel M., Biloxi, Miss. (27). 1881. **G**
 *Traphagen, Frank W., Ph. D., Bozeman, Montana. (35). 1889. **C E F**
 Trask, Spencer, 27 Pine St., New York, N. Y. (50). **I**
 Traylor, Miss Mary Clark, 653 S. Grant Ave., Denver, Colo. (50). **A**
 Treat, Erastus B., 241-243 W. 23d St., New York, N. Y. (29). **F I**
 *Trelease, Wm., Ph. D., Director Missouri Botanical Gardens, St. Louis, Mo. (39). 1891. **G**
 Trimble, Robert E., Asst. Meteorologist and Irrigation Engineer, Agricultural College, Fort Collins, Colo. (50). **D E**
 Troth, Alonzo P., Principal of High School, Leadville, Colo. (50). **F**
 *Trowbridge, Augustus, Ph. D., Dept. Physics, University of Wisconsin, Madison, Wis. (47). 1900. **B**
 *Trowbridge, Charles Christopher, Tutor in Physics, Columbia University, New York, N. Y. (50). 1901. **B**
 Trowbridge, Luther H., 13 Madison Ave., Detroit, Mich. (29).
 Trowbridge, Mrs. M. E. D., 13 Madison Ave., Detroit, Mich. (21).

G I

MEMBERS AND FELLOWS.

- *True, Fred. W., U. S. National Museum, Washington, D. C. (28).
1882. **F**
- *True, Rodney Howard, U. S. Dept. Agriculture, Washington,
D. C. (46). 1899. **G**
- Trueblood, Mary Esther, 9 Crawford St., Boston, Mass. (47). **A**
- Truesdell, George, Room 22, Wyatt Building, Washington, D. C.
(49). **I**
- Tucker, Richard Hawley, C. E., Astronomer, Lick Observatory,
Mt. Hamilton, Cal. (50). **A D**
- Tucker, William Albert, New Rockford, N. Dak. (51). **G**
- Tucker, William Conquest, Civil and Sanitary Engineer, 156 Fifth
Ave., New York, N. Y. (51). **D**
- *Tucker, Willis G., M. D., Albany Medical College, Albany, N. Y.
(29). 1888. **C**
- *TUCKERMAN, ALFRED, Ph. D., 342 W. 57th St., New York, N. Y.
(39). 1891. **C**
- Tuckerman, Louis Bryant, Jr., Box 1096, Station A, Lincoln,
Neb. (50). **A B**
- *Tufts, Frank Leo, Ph. D., Tutor in Physics, Columbia University,
New York, N. Y. (50). 1901. **B**
- Tuohy, John, Tulare, California. (50). **B I**
- Turck, Fenton B., M. D., 362 Dearborn Ave., Chicago, Ill. (51). **K**
- Turnbull, Thomas, Jr., M. D., Asst. Professor of Practice of
Medicine, Allegheny University, Allegheny, Pa. (50). **F K**
- Turner, Archelaus E., President Waynesburg College, Waynes-
burg, Pa. (50). **E I**
- Turner, J. Spencer, 70 Worth St., New York, N. Y. (43). **B**
- *Tuttle, Prof. Albert H., University of Virginia, Charlottesville,
Va. (17). 1874. **F**
- Tweedy, Miss Alice B., Spuyten Duyvil, New York, N. Y. (49).
- *Twitchell, E., Wyoming, Ohio. (39). 1891. **C**
- Tyler, Prof. H. W., 491 Boylston St., Boston, Mass. (51).
- Tyler, Ansel Augustus, Ph. D., Professor of Science, Bellevue
College, Bellevue, Neb. (50).
- Tyrrell, Joseph Burr, Mining Engineer, Dawson, Y. T., Canada.
(50). **D E**
- Tyson, James, M. D., 1506 Spruce St., Philadelphia, Pa. (51). **K**
- *Uhler, Philip R., 254 W. Hoffman St., Baltimore, Md. (19). 1874.
E F
- Uihlein, August, 332 Galena St., Milwaukee, Wis. (51)
- *Underwood, Lucien M., Columbia University, New York, N. Y.
(23). 1885. **G**
- Underwood, William Lyman, Lecturer on Biology, Mass. Institute
of Technology, Boston, Mass. (51). **F K**
- Updegraff, Milton, U. S. Naval Observatory, Washington, D. C.
(40). **A**

MEMBERS AND FELLOWS.

- *Upham, Warren, Secy. Minnesota Historical Society, St. Paul, Minn. (25). 1880. **E**
- Upton, George B., Milton, Mass. (50).
- *Upton, Winslow, Ladd Observatory, Providence, R. I. (29). 1883. **A**
- Vail, Miss Anna Murray, 29 Washington Square, New York, N. Y. (50).
- Vaile, Joel F., 420 Equitable Building, Denver, Colo. (50). **I**
- Valentine, Edw. P., Richmond, Va. (33). **H**
- Vallé, Jules F., M. D., 3303 Washington Ave., St. Louis, Mo. (51). **K**
- *Van Amringe, John Howard, Professor of Mathematics, Columbia University, New York, N. Y. (50). 1901. **A**
- Van Antwerp, Rev. Francis J., 26 Harper Ave., Detroit, Mich. (46).
- VAN BEUREN, FREDERICK T., 21 W. 14th St., New York, N. Y. (36).
- Van Brunt, Cornelius, 319 E. 57th St., New York, N. Y. (28).
- Vanderbilt, Cornelius, 602 Fifth Ave., New York, N. Y. (51). **D**
- Vanderlaan, J., M. D., 200 S. Terrace St., Muskegon, Mich. (51). **K**
- Vanderpoel, Frank, M. D., 153 Center St., Orange, N. J. (50). **F K**
- Van Dine, Delos Lewis, Honolulu Normal School, Honolulu, T. H. (51).
- Van Duyn, John, M. D., 318 James St., Syracuse, N. Y. (50). **F K**
- *Van Dyck, Prof. Francis Cuyler, P. O. Box 224, New Brunswick, N. J. (28). 1882. **B C F**
- Van Dyck, William Van Bergen, Cronly, N. C. (50). **D**
- Van Gelder, Arthur P., Landing, N. J. (50).
- Van Giesen, Ira, 1 Madison Ave., New York, N. Y. (49).
- Van Gundy, M. C., Herron Hill Laboratory, Center Ave. and Craig St., Pittsburg, Pa. (51). **C**
- *Van Hise, Charles R., Univ. of Wisconsin, Madison, Wis. (37). 1890. **E**
- Van Ingen, Dr. Gilbert, Columbia University, New York, N. Y. (49).
- Van Orden, Charles H., Civil Engineer, Catskill, N. Y. (51). **D**
- Van Ornum, Prof. John Lane, Professor of Civil Engineering, Washington University, St. Louis, Mo. (50). **D**
- Vansize, William B., 253 Broadway, New York, N. Y. (50). **D**
- *Van Slyke, Lucius L., Agr. Exper. Station, Geneva, N. Y. (41). 1901. **C**
- Van Valkenburg, Hermon L., Electrical Engineer, Amber Club, Shady Ave., Pittsburg, Pa. (51). **D**
- *Van Vleck, Prof. John M., Wesleyan University, Middletown, Conn. (23). 1875. **A**

MEMBERS AND FELLOWS.

- Van Winkle, Edgar B., 115 E. 70th St., New York, N. Y. (49).
 Varney, A. L., Major of Ordnance, U. S. A., San Antonio Arsenal,
 San Antonio, Texas. (44). **H**
 VAUX, GEORGE, JR., 404 Girard Building, Philadelphia, Pa. (33).
A E
 Veblen, Andrew A., Professor of Physics, State University, Iowa
 City, Iowa. (50). **B**
 Veeder, Curtis Hussey, Mechanical Engineer, 40 Willard St.,
 Hartford, Conn. (50). **B D**
 Velsor, Joseph A., 105 McDonough St., Brooklyn, N. Y. (50). **C**
 *Venable, Prof. F. P., Chapel Hill, N. C. (39). 1891. **C**
 Venable, Wm. Mayo, C. E., E. E., care Natl. Contracting Co.,
 11 Broadway, New York, N. Y. (50). **D**
 *Verrill, Prof. A. E., New Haven, Conn. (47). 1891. **F**
 Vest, Solomon Alexander, Assistant Chemist, Navassa Guano
 Co., Wilmington, N. C. (51). **C**
 Villard, Mrs. Henry, 145 W. 58th St., New York, N. Y. (36).
 Vinal, W. Irving, 1106 East Capitol St., Washington, D. C. (40). **E**
 Vineberg, Hiram N., M. D., 751 Madison Ave., New York, N. Y.
 (51). **K**
 *Vining, E. P., 49 Second St., San Francisco, Cal. (32). 1887. **H**
 *Vogdes, A. W., Major, 5th Artillery, U. S. A., San Diego, Cal. (32).
 1885. **E F**
 Voje, John Henry, M. D., Private Sanatorium Waldheim, Oconomo-
 woc, Wis. (51). **K**
 von Herrmann, C. F., Section Dir. U. S. Weather Bureau, Raleigh,
 N. C. (51). **B**
 von Ihering, F., Museu Paulista, Sao Paulo, Brazil. (51).
 von Mansfelde, Alexander S., M. D., "Quality Hill," Ashland,
 Neb. (50). **F G H K**
 *von Nardroff, Ernest R., 360a Tompkins Ave., Brooklyn, N. Y.
 (44). 1896. **B**
 von Ruck, Karl, M. D., Director, Winyah Sanitarium, Asheville,
 N. C. (51). **K**
 *von Schrenk, Hermann, Shaw School of Botany, St. Louis, Mo.
 (49). 1901. **G**
 *Voorhees, Louis A., P. O. Box 290, New Brunswick, N. J. (43).
 1895. **C**
 Voris, Floyd Thomas, Professor of Natural Science, Buena Vista
 College, Storm Lake, Iowa. (50). **B**
 Votey, J. William, Professor of Civil Engineering, University of
 Vermont, Burlington, Vt. (50). **D**
 Vreeland, Frederick K., E. E., Box 1877, New York, N. Y. (50).
B D G
 Waddell, Montgomery, 135 Broadway, New York, N. Y. (51). **D**
 Wade, John W., M. D., 318 N. Second St., Millville, N. J. (51). **K**

MEMBERS AND FELLOWS.

- Wadman, W. E., 102 Lord Ave., Bayonne, N. J. (50).
- *Wadsworth, M. Edw., Professor of Mining and Geology, Penna. State Coll., State College, Pa. (23). 1874. **E**
- Wadsworth, William Austin, Genesee, Livingston, Co., N. Y. (50).
G
- *Wagner, Frank C., Rose Polytechnic Institute, Terre Haute, Ind. (34). 1897. **D**
- Wagner, George, 1915 Niles Ave., St. Joseph, Mich. (46). **F G**
- Wagner, Samuel, President of Wagner Free Institute of Science, Franklin Building, 133 S. 12th St., Philadelphia, Pa. (51).
- Wainwright, Jacob T., Metallurgical Engineer, P. O. Box 774, Chicago, Ill. (51). **D E**
- Wainwright, John William, M. D., 177 W. 83d St., New York, N. Y. (51). **K**
- Waite, Frederick Clayton, Ph. D., Asst. Prof. of Histology and Embryology, Medical Department, Western Reserve Univ., Cleveland, Ohio. (50). **F K**
- Waite, M. B., U. S. Dept. Agriculture, Washington, D. C. (37). **G**
- *Walcott, Charles D., Director U. S. Geol. Survey, Washington, D. C. (25). 1882. **E F**
- *Waldo, Prof. Clarence A., Purdue University, Lafayette, Ind. (37). 1889. **A**
- *Waldo, Leonard, 520 Stelle Ave., Plainfield, N. J. (28). 1880. **A**
- Wales, Charles M., M. E., 11 Broadway, New York, N. Y. (51). **D**
- Wales, Salem H., 25 E. 55th St., New York, N. Y. (36).
- Walker, Byron Edmund, Toronto, Can. (38). **E**
- Walker, Charles R., M. D., Concord, N. H. (50). **K**
- Walker, George C., Room 367, Rookery Building, Chicago, Ill. (17).
- Walker, James, 49 Maiden Lane, New York, N. Y. (43).
- Walker, John A., E. M., 260 Montgomery St., Jersey City, N. J. (50). **C D E I**
- Walker, T. B., Pres., Minneapolis City Library Board, 803 Hennepin Ave., Minneapolis, Minn. (51).
- Wallace, Edwin Corby, Ph. G., Foot of Sixth St., Long Island City, N. Y. (47).
- Waller, Coleman Bailey, Vanderbilt Univ., Nashville, Tenn. (51).
A B C
- *WALLER, E., 7 Franklin Place, Morristown, N. J. (23). 1874.
- Walls, John Abbet, 990a Sherbrooke St., Montreal, Can. (51). **D**
- Walsh, James J., M. D., LL.D., Lecturer on Medicine, New York Polyclinic, 1973 Seventh Ave., New York, N. Y. (51). **K**
- WALSH, THOMAS F., Le Roy and Phelps Place, Washington, D. C. (49). **D**
- Walter, Miss Emma, 109 North 16th St., Philadelphia, Pa. (50). **E**
- Walter, Rudolph J., Mining Engineer and Metallurgist, 1452 Blake St., Denver, Colo. (50). **D E**

MEMBERS AND FELLOWS.

- Walter, W. J., 115 W. 57th St., New York, N. Y. (50).
- Walters, John Daniel, Prof. of Industrial Art, Kan. State Agricultural College, Manhattan, Kan. (51). **D**
- Walton, John C., M. D., Reidsville, N. C. (51). **K**
- Wantland, C. E., U. P. R.R. Co., 1025 17th St., Denver, Colo. (50). **E**
- Ward, Frank A., 16-26 College Ave., Rochester, N. Y. (40).
- *Ward, Henry A., 620 Division St., Chicago, Ill. (13). 1875. **E F H**
- *Ward, Prof. Henry B., University of Nebraska, Lincoln, Neb. (48). 1899. **F**
- Ward, J. Langdon, 120 Broadway, New York, N. Y. (29). **I**
- *Ward, Lester F., U. S. Geol. Survey, Washington, D. C. (26). 1879. **E G**
- Ward, Louis Clinton, Teacher of Geology and Geography, Bloomington, Ind. (51). **E**
- Ward, Milan Lester, Professor of Mathematics and Astronomy, Ottawa Univ., Ottawa, Kansas. (50). **A**
- Ward, Robert De C., Harvard Univ., Cambridge, Mass. (47).
- *Ward, Dr. R. H., 53 Fourth St., Troy, N. Y. (17). 1874. **F G**
- Ward, Willard Parker, Ph. D., Mining Engineer, 164 W. 58th St., New York, N. Y. (50). **D E**
- Warden, Albert W., M. D., 325 Fulton St., Weehawken, N. J. (51). **K**
- Warder, Charles Barclay, M. D., 1305 N. Broad St., Philadelphia, Pa. (51). **K**
- *Warder, Prof. Robert B., Howard University, Washington, D. C. (19). 1881. **B C**
- Wardlaw, George A., Electrical Engineer, Amber Club, Shady Ave., Pittsburg, Pa. (51). **D**
- Wardle, Harriet N., 125 N. 10th St., Philadelphia, Pa. (47). **E H**
- Ware, Miss Mary L., 41 Brimmer St., Boston, Mass. (47).
- *Ware, Wm. R., School of Architecture, Columbia University, New York, N. Y. (36). 1901. **D**
- *WARINGTON, ROBERT, F. R. S., Rothamsted, Harpenden, England. (40). 1899. **C**
- Warner, Charles F., 837 State St., Springfield, Mass. (45). **B**
- *WARNER, JAMES D., 463 E. 26th St., Flatbush, Brooklyn, N. Y. (18). 1874. **A B**
- *Warner, Worcester R., 1722 Euclid Ave., Cleveland, Ohio. (33). 1888. **A B D**
- Warren, Rt. Rev. Henry White, Bishop M. E. Church, University Park, Colo. (50). **A**
- *Warren, Prof. Howard C., Princeton Univ., Princeton, N. J. (46). 1901. **H K**
- *Warren, Joseph W., M. D., Bryn Mawr, Pa. (31). 1886. **F**
- *Warren, S. Edward, Newton, Mass. (17). 1875. **A I**

MEMBERS AND FELLOWS.

- Warren, William R., 81 Fulton St., New York, N. Y. (49).
- Warrington, James N., 1711 South Hope St., Los Angeles, Cal. (34). **A B D**
- *Washington, Dr. Henry S., Locust, N. J. (44). 1897. **E**
- Waterhouse, James Smartt, Professor of Chemistry and Natural Science, Cumberland University, Lebanon, Tenn. (50). **C F G**
- Watson, Benj. Mauston, Bussey Institution, Jamaica Plain, Mass. (50).
- Watson, Miss C. A., North Andover, Mass. (31). **D**
- Watson, Professor Joseph Ralph, 909 Fairmount St., Cleveland, Ohio. (50). **G**
- Watson, Thomas A., Weymouth, Mass. (42). **E**
- *WATSON, PROF. WM., 107 Marlborough St., Boston, Mass. (12). 1884. **A**
- Watters, William, A. M., M. D., 26 S. Common St., Lynn, Mass. (40). **E G**
- Watterson, Miss Ada, 153 W. 84th St., New York, N. Y. (49). **G**
- *Wead, Charles K., U. S. Patent Office, Washington, D. C. (47). 1898. **B**
- Weatherly, Ulysses Grant, Professor of Economics, University of Indiana, Bloomington, Ind. (50). **I**
- Weaver, Edwin Oscar, Professor of Physics and Biology, Wittenberg College, Springfield, Ohio. (51). **B F G**
- Weaver, Gerrit E., Hambleton, 916 Farragut Terrace, West Philadelphia, Pa. (38). **G I**
- Webb, Howard Scott, Professor of Electrical Engineering, University of Maine, Orono, Maine. (50). **D**
- *Webb, Prof. J. Burkitt, Stevens Institute, Hoboken, N. J. (31). 1883. **A B D**
- *Webber, Herbert J., U. S. Dept. Agriculture, Washington, D. C. (47). 1900. **G**
- *Weber, Prof. Henry A., Ohio State Univ., Columbus, Ohio. (35). 1888. **C**
- Webster, Albert Lowry, C. E., Consulting Civil and Sanitary Engineer, 112 E. 40th St., New York, N. Y. (50). **C D**
- *Webster, Prof. Arthur Gordon, Clark University, Worcester, Mass. (47). 1898. **A B**
- Webster, Edgar H., Professor of Physical Science, Atlanta University, Atlanta, Ga. (50). **B**
- *Webster, Prof. F. M., Agric. Exper. Station, Wooster, Ohio. (35). 1890. **F**
- Webster, Frederic S., Carnegie Museum, Pittsburg, Pa. (51). **E F H**
- *Weed, Clarence M., Ph. D., Durham, N. H. (38). 1890. **F**
- Weed, J. N., 244 Grand St., Newburgh, N. Y. (37). **E I**
- Weeks, Edwin Ruthven, Consulting Engineer, 3408 Harrison St., Kansas City, Mo. (50). **A B D I**

MEMBERS AND FELLOWS.

- Weeks, John Elmer, M. D., 46 E. 57th St., New York, N. Y. (51).
K
- *Weems, J. B., Ph. D., Agric. College, Ames, Iowa. (44). 1900. **C**
Weick, Charles W., Columbia University, New York, N. Y. (48). **D**
Weimer, Edgar A., M. E., Supt. Weimer Machine Works Co.,
Lebanon, Pa. (51). **D**
Weinzirl, John, Vice Director, Hadley Clim. Lab., Univ. of New
Mexico, Albuquerque, New Mex. (45). **G**
- *Welch, William Henry, M. D., 935 St. Paul St., Baltimore, Md.
(47). 1900. **F H**
Weld, Laenas Gifford, Dean of Graduate College State University
of Iowa, Iowa City, Iowa. (41). **A**
Welin, John E., Professor of Physics and Chemistry, Bethany
College, Lindsborg, Kansas. (50). **B C E**
Wells, Eliab Horatio, M. D., Professor of Natural Science, Baylor
Female College, Belton, Texas. (50). **F K**
Wells, Frank, M. D., 178 Devonshire St., Boston, Mass. (47). **C**
Wells, Samuel, 45 Commonwealth Ave., Boston, Mass. (24) **H**
Wells, William H., Jr., 2 Norfolk St., Strand, W. C., London,
England. (39). **E**
WELSH, FRANCIS RALSTON, 328 Chestnut St., Philadelphia, Pa.
(51).
Wenner, Francis W., Supt. of Public Schools, North Baltimore,
Wood Co., Ohio. (51). **B**
Wernicke, Prof. Paul, 411 S. Limestone St., Lexington, Ky. (44).
A B
Wesson, David, Southern Cotton Oil Co., Savannah, Ga. (50). **C**
West, Haarlem Ethneen, Mining Engineer, General Manager
Pacific Northwest Mining Corporation, Libby, Mont. (50). **D**
West, Thomas Dyson, M. E., Mgr., T. D. West Engrg. Co., Sharp-
ville, Pa. (51). **D**
Westgate, Lewis Gardner, Ph. D., Professor of Geology, Ohio
Wesleyan University, Delaware, Ohio. (51). **E**
Westinghouse, George, Pittsburg, Pa. (50). **D**
Westinghouse, Henry Herman, Wilmerding, Pa. (51). **D**
*Weston, Edward, 645 High St., Newark, N. J. (33). 1887. **B C D**
Wetzler, Joseph, 240-242 W. 23d St., New York, N. Y. (36).
Weygant, Colonel Charles H., Newburgh, N. Y. (50). **I**
Wheatland, Marcus F., M. D., 84 John St., Newport, R. I. (51).
H K
Wheatley, Frank G., M. D., 47 Adams St., North Abington, Mass.
(51). **K**
*Wheeler, Alvin Sawyer, Ph. D., Assistant Professor of Chemistry,
University of North Carolina, Chapel Hill, N. C. (50). 1901. **C**
*Wheeler, Eben S., U. S. Engineer Office, Detroit, Mich. (50).
1901. **D**

MEMBERS AND FELLOWS.

- *Wheeler, Henry Lord, Sheffield Lab., New Haven, Conn. (50).
1901. **C**
- Wheeler, Schuyler Skaats, Ampere, N. J. (50). **D**
- Wheeler, William, C. E., Concord, Mass. (41).
- *Wheeler, William Morton, Professor of Zoology, University of
Texas, Austin, Texas. (50). 1901. **F**
- Whitaker, Milton C., Dept. of Chemistry, Columbia University,
New York, N. Y. (50).
- White, Charles G., Lake Linden, Mich. (46). **B C**
- White, Charles H., U. S. N., Center Sandwich, N. H. (34). **C**
- *White, David, U. S. Geol. Survey, Washington, D. C. (40). 1892.
E F
- *White, Horace, Editor "New York Evening Post," 18 W. 69th
St., New York, N. Y. (50). 1901. **I**
- *White, H. C., Ph. D., University of Georgia, Athens, Ga. (29).
1885. **C**
- *WHITE, PROF. I. C., State Geologist of West Virginia, Morgan-
town, W. Va. (25). 1882. **E**
- White, John Williams, 18 Concord Ave., Cambridge, Mass. (47).
- White, LeRoy S., 19 Buckingham Ave., Waterbury, Conn. (23).
- White, Thaddeus R., 257 W. 45th St., New York, N. Y. (42). **A**
- White, Walter Henry, M. D., 220 Marlborough St., Boston, Mass.
(51). **K**
- *Whitfield, J. Edward, 406 Locust St., Philadelphia, Pa. (44).
1896. **C**
- *Whitfield, R. P., Amer. Mus. Nat. History, Central Park, New
York, N. Y. (18). 1874. **E F H**
- Whiting, S. B., 11 Ware St., Cambridge, Mass. (33). **D**
- *Whiting, Miss Sarah F., Wellesley College, Wellesley, Mass. (31).
1883. **A B**
- *Whitman, Prof. Charles O., University of Chicago, Chicago, Ill.
(43). 1898. **F**
- *Whitman, Prof. Frank P., Adelbert College, Cleveland, Ohio. (33).
1885. **A B**
- *Whitney, Miss Mary W., Vassar College, Poughkeepsie, N. Y. (47).
1900. **A**
- *Whitney, Willis Rodney, Mass. Inst. Tech., Boston, Mass. (46).
1900. **C**
- Whitted, Thomas Byrd, General Elec. Co., Denver, Colo. (50). **D**
- Whittemore, Williams C., 1526 N. H. Ave., Washington, D. C.
(49).
- Wiechmann, F. G., M. D., 771 West End Ave., New York, N. Y.
(50). **F K**
- *Wiegand, Karl McKay, Ph. D., Cornell University, Ithaca, N. Y.
(45). 1899. **G**
- Wightman, Merle J., Electrical Engineer, 150 Nassau St., New
York, N. Y. (50). **D**

MEMBERS AND FELLOWS.

- Wilbour, Mrs. Charlotte B., 40 Central Park, South, New York, N. Y. (28).
- *Wilbur, A. B., Middletown, N. Y. (23). 1874. **E**
- *Wilbur, Ray Lyman, M. D., Assistant Professor of Physiology, Stanford University, Cal. (50). 1901. **F K**
- *Wilcox, Edwin Mead, Ph. D., Prof. of Biology, Ala. Poly. Inst. Auburn, Ala. (50). 1901. **F G**
- Wilcox, Miss Emily T., Middletown, Conn. (33). **A B**
- *Wilcox, Miss Mary Alice, Ph. D., Professor of Zoology, Wellesley College, Wellesley, Mass. (50). 1901. **F**
- *Willcox, Walter F., Ph. D., Professor of Economics, Cornell University, Ithaca, N. Y. (50). 1901. **I**
- *WILCOX, WILLIAM W., Inventor and Manufacturer, 187 South Main St., Middletown, Conn. (50). **D I**
- Wilder, Burt Green, Prof. of Neurology, Cornell University, Ithaca, N. Y. (51). **K**
- Wiley, Andrew J., C. E., Chief Engr. Boise-Payette River Electric Power Co., Boise, Idaho. (51). **D**
- *Wiley, Harvey W., Ph. D., U. S. Dept. Agriculture, Washington, D. C. (21). 1874. **C**
- Wiley, William H., C. E., 43 E. 19th St., New York, N. Y. (50). **D E**
- Wilkins, Wm. Glyde, C. E., Professor of Mining Engineering, Western Univ. of Penna., Pittsburg, Pa. (50). **D E**
- Wilkinson, Levi Washington, Professor of Industrial and Sugar Chemistry, Tulane University, New Orleans, La. (50). **C**
- Willard, Julius Terrass, Dir. Kans. State Exper. Sta., Manhattan Kans. (50). **C**
- Wille, Henry Valentin, M. E., Engineer of Tests, Baldwin Locomotive Works, 2600 Girard Ave., Philadelphia, Pa. (51). **D**
- Williams, Arthur, The New York Edison Co., 55 Duane St., New York, N. Y. (50). **D**
- *Williams, Benezette, 153 La Salle St., Chicago, Ill. (33). 1887. **D**
- Williams, Charles B., North Carolina Dept. of Agric., Raleigh, N. C. (47).
- *Williams, Charles H., M. D., 15 Arlington St., Boston, Mass. (22). 1874.
- Williams, Charles S., 166 Montgomery St., Newburgh, N. Y. (50). **I**
- *Williams, Prof. Edw. H., Jr., 117 Church St., Bethlehem, Pa. (25). 1894. **D E**
- *Williams, Francis H., M. D., 505 Beacon St., Boston, Mass. (29). 1890.
- Williams, Frank H., Greene, N. Y. (50). **D**
- *Williams, Prof. Henry Shaler, Yale University, New Haven, Conn. (18). 1882. **E F**
- Williams, Jacob Lafayette, M. D., 4 Walnut St., Boston, Mass. (51). **K**

MEMBERS AND FELLOWS.

- *Williams, Dr. J. Whitridge, Professor of Obstetrics, Johns Hopkins University, Baltimore, Md. (50). 1901. **F K**
- Williams, Miss Kate Elizabeth, 1450 Pearl St., Denver, Colo. (50). **E F I**
- Williams, Stephen Riggs, Professor of Biology, Miami University, Oxford, Ohio. (50). **F**
- Williamson, Edward Bruce, Bluffton, Ind. (50). **F**
- Williamson, G. A., 14 Dey St., New York, N. Y. (49).
- Williamson, Mrs. M. Burton, 1060 W. Jefferson St., Los Angeles, Cal. (44). **F**
- *Willis, Bailey, U. S. Geological Survey, Washington, D. C. (36). 1890. **E**
- *Willoughby, Charles C., Peabody Museum, Cambridge, Mass. (45). 1897. **H**
- Wills, Joseph Lainson, F. C. S., Chief of Laboratories, National Brewers' Academy, 133 Midwood St., Brooklyn, N. Y. (50).
B C F
- WILMARTH, MRS. HENRY D., 51 Eliot St., Jamaica Plain, Mass. (40).
- Wilmore, J. J., Director, Mechanical Department, Ala. Polytechnic Institute, Auburn, Ala. (51). **D**
- Wilson, Prof. Andrew G., Hebron, Neb. (43). **E**
- *Wilson, E. B., Columbia University, New York, N. Y. (49). 1900.
- Wilson, Fredk. Morse, M. D., 834 Myrtle Ave., Bridgeport, Conn. (51). **K**
- *Willson, Prof. Frederick N., Princeton, N. J. (33). 1887. **A D**
- *Wilson, Henry Van Peters, Professor of Biology, University of North Carolina, Chapel Hill, N. C. (50). 1901. **F**
- Wilson, John C., Cosmos Club, Washington, D. C. (49). **I**
- *Wilson, Joseph Miller, Room 1030, Drexel Building, Philadelphia, Pa. (33). 1886. **D**
- Willson, Mortimer, M. D., Port Huron, Mich. (50). **A F**
- Wilson, Robert Lee, M. D., Assistant Surgeon, U. S. Marine Hospital Service, Box 274, Honolulu, T. H. (50). **K**
- *Wilson, Robert N., Macleod, Alberta, Canada. (42). 1895. **H**
- *Willson, Robert W., Cambridge, Mass. (30). 1890. **A B**
- Wilson, William Hyatt, Prof. of Mathematics, Univ. of Wooster, Wooster, Ohio. (50). **A**
- *Wilson, Prof. William Powell, Philadelphia Commercial Museum, 233 S. 4th St., Philadelphia, Pa. (38). 1889. **G**
- Winchell, Alexander Newton, Professor of Geology and Mineralogy, State School of Mines, Butte, Mont. (50). **E**
- *Winchell, Horace V., Butte, Montana. (34). 1890. **C E**
- *Winchell, Prof. N. H., Minneapolis, Minn. (19). 1874. **E H**
- Windesheim, Gustave, M. D., 255 Main St., Kenosha, Wis. (51). **K**
- Windsor, Sarah Sweet, M. D., 138 Marlborough St., Boston, Mass. (47). **F H**

MEMBERS AND FELLOWS.

- Wingate, Miss Hannah S., 58 W. 127th St., New York, N. Y. (31).
E I.
- *Winterhalter, A. G., Lt. Com. U. S. N., U. S. S. "Helena," care
P. M., San Francisco, Cal. (37). 1893. **A**
- *Withers, Prof. W. A., A. and M. College, Raleigh, N. C. (33).
1891. **C**
- Witte, Max Ernest, M. D., Superintendent of Clarinda State
Hospital, Clarinda, Ia. (51). **K**
- *Witthaus, Dr. R. A., Cornell Medical College, 1st Ave., and 28th
St., New York, N. Y. (35). 1890.
- Wolcott, Mrs. Henrietta L. T., Dedham, Mass. (29).
- Wolf, August S., Examiners' Room, Equitable Life Assurance
Society, 120 Broadway, New York, N. Y. (49).
- Wolfe, Elmer Ellsworth, Ph. D., Principal of the Academy,
Marietta College, Marietta, Ohio. (51). **B C G**
- *Wolff, Frank A., Jr., Ph. D., Asst. Physicist, N. B. S., 1429 R
St. N.W., Washington, D. C. (47). 1900. **B**
- *Wolff, Dr. John E., University Museum, Cambridge, Mass. (36).
1894. **E**
- *Woll, Fritz Wilhelm, Madison, Wis. (42). 1897. **C**
- Wolverton, Byron C., Engineer, N. Y. & Pa. Telephone and
Telegraph Co., P. O. Box 43, Elmira, N. Y. (50). **D**
- Wood, Mrs. Cynthia A., 171 W. 47th St., New York, N. Y. (43).
- Wood, Miss Elvira, 198 Adams St., Waltham, Mass. (47).
- Wood, James Haughton, Ph. D., Instructor in Anthropology,
Harvard University, Cambridge, Mass. (50). **H**
- *Wood, Robert Williams, Professor of Experimental Physics,
Johns Hopkins University, Baltimore, Md. (46). 1900. **B**
- Wood, Thomas D., M. D., Prof. of Physical Education, Teachers'
College, Columbia University, N. Y. C. (51). **K**
- Wood, Stuart, 400 Chestnut St., Philadelphia, Pa. (51).
- WOOD, WALTER, 400 Chestnut St., Philadelphia, Pa. (33). **F I**
- Woodberry, Miss Rosa Louise, Teacher of Natural Science, Lucy
Cobb Institute, Athens, Ga. (51). **B C**
- Woodbridge, Tyler Reed, C. E., care The Taylor and Brunton
Sampling Co., Victor, Colo. (50). **D**
- *Woodbury, C. J. H., Amer. Bell Telephone Co., 125 Milk St.,
Boston, Mass. (29). 1884. **D**
- *Woodhull, John Francis, Teachers' College, Morningside Heights,
New York, N. Y. (43). 1899.
- *Woodman, Dr. Durand, 80 Beaver St., New York, N. Y. (41).
1896.
- *Woods, Albert F., U. S. Dept. Agric., Washington, D. C. (43).
1897. **G**
- *Woods, Charles D., Professor of Agriculture, University of Maine,
Orono, Maine. (50). 1901. **G**

MEMBERS AND FELLOWS.

- Woods, Fred. A., M. D., Harvard Medical School, Boston, Mass. (51). **K**
- Woods, John A., 120 Broadway, New York, N. Y. (49).
- Woodward, Anthony, Ph. D., Amer. Mus. Nat. History, Central Park, New York, N. Y. (49).
- *Woodward, Prof. Calvin M., Washington University, St. Louis, Mo. (32). 1884. **A D I**
- *Woodward, R. S., Columbia University, New York, N. Y. (33). 1885. **A B D**
- Woodward, William Carpenter, E. E., 5 Charles Field St., Providence, R. I. (50). **C D**
- Woodworth, C. W., Asst. Professor of Entomology, University of California, Berkeley, Cal. (50). **F**
- Woodworth, George Keen, Asst. Examiner Electrical Division, U. S. Patent Office, Washington, D. C. (50). **D**
- *Woodworth, R. S., Ph. D., 338 E. 26th St., New York, N. Y. (49). 1901. **H K**
- *Woodworth, William McMichael, Ph. D., 149 Brattle St., Cambridge, Mass. (44). 1898. **F**
- Wooten, J. S., M. D., Austin, Texas. (51). **K**
- Worcester, Dean C., U. S. Philippine Commission, Manila, P. I. (46). **F H**
- *Wright, Prof. Albert A., Oberlin College, Oberlin, Ohio. (24). 1880. **E F**
- *Wright, Prof. Arthur W., Yale University, New Haven, Conn. (14). 1874. **A B**
- Wright, Rev. Clement Blake Bergin, Ph. D., 796 Astor St., Milwaukee, Wis. (50). **H**
- *Wright, Carroll D., LL.D., Dept. of Labor, Washington, D. C. (41). 1894. **I**
- *Wright, Prof. Geo. Frederick, Drawer C, Oberlin, Ohio. (29). 1882. **E H**
- *Wright, John S., Eli Lily & Co., Indianapolis, Ind. (42). 1899. **G**
- Wright, Jonathan, M. D., 73 Remsen St., Brooklyn, N. Y. (43). **K**
- Wright, Walter Livingston, Jr., Professor of Mathematics, Lincoln University, Pa. (50). **A**
- Wuensch, Alfred F., 1556 Detroit St., Denver, Colo. (50). **C D E**
- WUNDERLICH, FREDERICK W., M. D., 165 Remsen St., Brooklyn, N. Y. (45).
- Würtele, John Hunter, Acton Vale, P. Q., Canada. (48)
- *Würtele, Rev. Louis C., Acton Vale, P. Q., Canada. (11). 1875. **E**
- Wurts, Alexander Jay, Manager Nernst Lamp Co., Garrison Alley and Fayette St., Pittsburg. Pa. (50). **D**
- Wyeth, John A., M. D., 19 W. 35th St., New York, N. Y. (51). **K**

MEMBERS AND FELLOWS.

- Yanney, Benjamin F., Prof. Mathematics and Astronomy, Mt. Union College, Alliance, Ohio. (51). **A**
- *Yarrow, Dr. H. C., 814 17th St. N.W., Washington, D. C. (23). 1874.
- Yates, J. A., Professor of Natural Science, Ottawa University, Ottawa, Kan. (50). **B C G**
- Yeates, William Smith, State Geologist, Atlanta, Ga. (50). **C E**
- York, Lewis Edwin, Supt. Public Schools, Kingsville, Ohio. (50).
- I**
- Youmans, Vincent J., 175 Elm Place, Mount Vernon, N. Y. (43).
- *Young, A. V. E., Northwestern University, Evanston, Ill. (33). 1886. **B C**
- *Young, C. A., Princeton University, Princeton, N. J. (18). 1874. **A B D**
- Young, Clinton Mason, 387 School St., Athol, Mass. (51). **K**
- *Young, Stewart Woodford, Asst. Professor of Chemistry, Stanford University, Cal. (50). 1901. **C**
- Young, Walter Douglas, E. E., B. & O. R.R. Co., 309 Oakdale Road, Roland Park, Baltimore, Md. (51). **D**
- *Zalinski, E. L., U. S. A., Century Club, 7 W. 43d St., New York, N. Y. (36). 1891. **D**
- *Zeleny, John, Associate Professor of Physics, University of Minnesota, Minneapolis, Minn. (50). 1901. **B**
- *Ziwet, Alexander, 644 S. Ingalls St., Ann Arbor, Mich. (38). 1890. **A**

INCORPORATED SCIENTIFIC BODIES.

[Holding membership under the provisions of Article 3 of the Constitution.]

- Hendrix College Library, Conway, Ark. (51).
- Manchester Institute of Arts and Sciences, Manchester, N. H. (48).
- Mt. Carmel Scientific Society, Mt. Carmel, Ill. (50).
- Nebraska University Library, Lincoln, Neb. (51).
- P. M. Musser Public Library, Muscatine, Iowa. (51).
- Philadelphia, The Free Library of, 1217-1221 Chestnut St., Philadelphia, Pa. (51).

SUMMARY:

(June 2, 1902.)

Surviving Founders, 3; Patrons, 2; Honorary Fellows, 2; Fellows, 1040; Members, 2355; Total, 3402.

NOTE.—The omission of an address in the foregoing list indicates that letters mailed to that last printed were returned as uncalled for. Information of the present address of the members so indicated is requested by the PERMANENT SECRETARY.

DECEASED MEMBERS.

[A list of deceased members of the Association, so far as known at the time of publishing the volume of Proceedings of the Springfield meeting, May, 1896, is given in that volume. At the Buffalo meeting the Council directed the Permanent Secretary to omit the printing of the full list of deceased members in the annual volumes and to print only the additions to the list. Since the publication of the list printed in the Denver Proceedings (Vol. 50) notices have been received of the decease of the following members.]

Goff, E. S., Madison, Wis. (35). Died June 6, 1902.

Hyatt, Alpheus, Natural History Society, Boston, Mass. (18).

Born April 5, 1838. Died January 15, 1902.

Lacoe, Ralph D., 35 Exeter St., Pittston, Pa. (31).

Morton, H., Stevens Institute of Technology, Hoboken, N. J. (18).

ROBERTSON, THOMAS D., Rockford, Ill. (10). Born March 4, 1818. Died February 5, 1902.

Smith, J. Barry, S. J., Georgetown University, Washington, D. C. (50). Died September, 1901.

Smith, Miss Sara Winthrop, Nantucket, Mass. (50). Died January 2, 1902.

SMITH, USELMA C., 1515 Green St., Philadelphia, Pa. (33). Died May 2, 1902.

Stevens, Edwin A., Victor, Colo. (50). Died January, 1902.

Wilson, Thomas, LL.D., U. S. National Museum, Washington, D. C. (36). Died May 4, 1902.

Wright, Rufus, 19 N. May St., Chicago, Ill. (37). Died April, 1900.

PROCEEDINGS

OF THE

AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE.

8VO. PAPER. WITH NUMEROUS ILLUSTRATIONS.

Vol.					
	I.—Philadelphia Meeting,	1848,	pages 156,	published	1849.
	II.—Cambridge	1849,	479,		1850.
	III.—Charleston	1850,	239,		1850.
	IV.—New Haven	1850,	449,		1851.
	V.—Cincinnati	1851,	287,		1851.
	VI.—Albany	1851,	480,		1852.
	VII.—Cleveland	1853,	312,		1856.
	VIII.—Washington	1854,	372,		1855.
	IX.—Providence	1855,	357,		1856.
	X.—2d Albany	1856,	547,		1857.
	XI.—Montreal	1857,	449,		1858.
	XII.—Baltimore	1858,	376,		1859.
	XIII.—Springfield	1859,	444,		1860.
	XIV.—Newport	1860,	328,		1861.
	XV.—Buffalo	1866,	174,		1867.
	XVI.—Burlington	1867,	218,		1868.
	XVII.—Chicago	1868,	410,		1869.
	XVIII.—Salem	1869,	352,		1870.
	XIX.—Troy	1870,	427,		1871.
	XX.—Indianapolis	1871,	491,		1872.
	XXI.—Dubuque	1872,	339,		1873.
	XXII.—Portland	1873,	669,		1874.
	XXIII.—Hartford	1874,	378,		1874.
	XXIV.—Detroit	1875,	541,		1876.
	XXV.—2d Buffalo	1876,	424,		1877.
	XXVI.—Nashville	1877,	456,		1878.
	XXVII.—St. Louis	1878,	424,		1879.
	XXVIII.—Saratoga	1879,	636,		1880.
	XXIX.—Boston	1880,	875,		1881.
	XXX.—2d Cincinnati	1881,	504,		1882.
	XXXI.—2d Montreal	1882,	743,		1883.
	XXXII.—Minneapolis	1883,	598,		1884.
	XXXIII.—2d Philadelphia	1884,	831,		1885.
	XXXIV.—Ann Arbor	1885,	662,		1886.
	XXXV.—3d Buffalo	1886,	486,		1887.
	XXXVI.—New York	1887,	466,		1888.
	XXXVII.—2d Cleveland	1888,	536,		1889.
	XXXVIII.—Toronto	1889,	600,		1890.
	XXXIX.—2d Indianapolis	1890,	597,		1891.
	XL.—2d Washington	1891,	585,		1892.
	XLI.—Rochester	1892,	496,		1893.
	XLII.—Madison	1893,	500,		1894.
	XLIII.—Brooklyn	1894,	599,		1895.
	XLIV.—2d Springfield	1895,	534,		1896.
	XLV.—4th Buffalo	1896,	353,		1897.
	XLVI.—2d Detroit	1897,	579,		1898.
	XLVII.—2d Boston	1898,	744,		1899.
	XLVIII.—Columbus	1899,	527,		1899.
	XLIX.—2d New York	1900,	409,		1900.
	L.—Denver	1901,	402,		1902.

Price of the Proceedings \$1.50 a Volume, or to Members \$1.00 a Volume for the last Five Years; Earlier Volumes (to members), 50 cents Each.

Orders will be received for any of the above volumes of Proceedings, bound in full cloth, at 50 cents extra per volume; or in half brown morocco, at \$1.00 extra per volume. Uniform Cloth Covers for the Proceedings, by mail, 30 cents each; or 25 cents by express.

Address: L. O. HOWARD, Permanent Secretary,
Cosmos Club, Washington, D. C.

CONSTITUTION

LIST OF MEETINGS

OFFICERS

COMMITTEES AND MEMBERS

OF

The American Association

THE LIBRARY OF THE

FEB 9 1933

UNIVERSITY OF ILLINOIS

ADVANCEMENT OF SCIENCE,

FIFTY-THIRD MEETING

HELD AT

ST. LOUIS, MO.

DECEMBER, 1903-JANUARY, 1904.

PUBLISHED BY THE PERMANENT SECRETARY

1903

(CORRECTED TO DECEMBER 1, 1903.)

CONSTITUTION

LIST OF MEETINGS

OFFICERS

COMMITTEES AND MEMBERS

OF

The American Association

FOR THE

ADVANCEMENT OF SCIENCE,

THE LIBRARY OF THE
FIFTY-THIRD MEETING

FEB 9 1933

HELD AT

UNIVERSITY OF ILLINOIS
ST. LOUIS, MO.

DECEMBER, 1903—JANUARY, 1904.

PUBLISHED BY THE PERMANENT SECRETARY

1903

(CORRECTED TO DECEMBER 1, 1903.)

EDITED BY
L. O. HOWARD,
Permanent Secretary.

WASHINGTON, D. C.
GIBSON BROS., PRINTERS AND BOOKBINDERS.
1903.

506
AMA
1903

Officers for the St. Louis Meeting.

PRESIDENT.

CARROLL D. WRIGHT, Commissioner of Labor, Washington, D. C.

VICE-PRESIDENTS.

- A. **Mathematics and Astronomy**—OTTO H. TITTMANN, Coast and Geodetic Survey, Washington, D. C.
- B. **Physics**—E. H. HALL, Harvard University, Cambridge, Mass.
- C. **Chemistry**—W. D. BANCROFT, Cornell University, Ithaca, N. Y.
- D. **Mechanical Science and Engineering**—C. M. WOODWARD, Washington University, St. Louis, Mo.
- E. **Geology and Geography**—I. C. RUSSELL, University of Michigan, Ann Arbor, Mich.
- F. **Zoology**—EDW. L. MARK, Harvard University, Cambridge, Mass.
- G. **Botany**—T. H. MACBRIDE, University of Iowa, Iowa City, Iowa.
- H. **Anthropology**—M. H. SAVILLE, American Museum of Natural History, New York, N. Y.
- I. **Social and Economic Science**—SIMEON E. BALDWIN, New Haven, Conn.
- K. **Physiology and Experimental Medicine**—H. P. BOWDITCH, Harvard University, Cambridge, Mass.

PERMANENT SECRETARY.

L. O. HOWARD, Cosmos Club, Washington, D. C.

GENERAL SECRETARY.

CH. WARDELL STILES, Public Health and Marine Hospital Service
Washington, D. C.

SECRETARY OF THE COUNCIL.

CHARLES S. HOWE, Case School, Cleveland, Ohio

OFFICERS FOR THE ST. LOUIS MEETING.

SECRETARIES OF THE SECTIONS.

- A. **Mathematics and Astronomy**—L. G. WELD, University of Iowa, Iowa City, Iowa.
- B. **Physics**—DAYTON C. MILLER, Case School, Cleveland, Ohio.
- C. **Chemistry**—CHARLES L. PARSONS, New Hampshire College, Durham, N. H.
- D. **Mechanical Science and Engineering**—WM. T. MAGRUDER, Ohio State University, Columbus, Ohio.
- E. **Geology and Geography**—G. B. SHATTUCK, Johns Hopkins University, Baltimore, Md.
- F. **Zoology**—C. JUDSON HERRICK, Denison University, Granville, Ohio.
- G. **Botany**—F. E. LLOYD, Teachers' College, New York, N. Y.
- H. **Anthropology**—GEO. H. PEPPER, American Museum of Natural History, New York, N. Y.
- I. **Social and Economic Science**—J. F. CROWELL, Bureau of Statistics, Washington, D. C.
- K. **Physiology and Experimental Medicine**—F. S. LEE, Columbia University, New York, N. Y.

TREASURER.

R. S. WOODWARD, Columbia University.

ASSISTANT SECRETARY.

RICHARD S. CLIFTON, Washington, D. C.

Members of Council for the St. Louis Meeting.

Past Presidents.—SIMON NEWCOMB, Washington; GEORGE F. BARKER, Philadelphia; GEORGE J. BRUSH, New Haven; C. A. YOUNG, Princeton; EDWARD S. MORSE, Salem; SAMUEL P. LANGLEY, Washington; T. C. MENDENHALL, Worcester; GEORGE L. GOODALE, Cambridge; ALBERT B. PRESCOTT, Ann Arbor; EDWARD W. MORLEY, Cleveland; THEODORE GILL, Washington; WOLCOTT GIBBS, Newport; F. W. PUTNAM, Cambridge; G. K. GILBERT, Washington; R. S. WOODWARD, New York; C. S. MINOT, Boston; ASAPH HALL, South Norfolk; IRA REMSEN, Baltimore.

Vice-Presidents of the Pittsburg Meeting.—G. W. HOUGH, Evans-ton; W. S. FRANKLIN, South Bethlehem; H. A. WEBER, Columbus; J. J. FLATHER, Minneapolis; O. A. DERBY, Sao Paulo; C. C. NUTTING, Iowa City; D. H. CAMPBELL, Stanford University; STEWART CULIN, Philadelphia; CARROLL D. WRIGHT, Washington; W. H. WELCH, Baltimore.

Vice-Presidents of the Washington Meeting.—GEORGE BRUCE HALSTED, Austin; E. F. NICHOLS, Hanover; CHARLES BASKERVILLE, Chapel Hill; C. A. WALDO, Lafayette; WM. M. DAVIS, Cambridge; C. W. HARGITT, Syracuse; F. V. COVILLE, Washington; GEORGE A. DORSEY, Chicago; H. T. NEWCOMB, Philadelphia; W. H. WELCH, Baltimore.

Officers for the St. Louis Meeting.—CARROLL D. WRIGHT, Washington; O. H. TITTMANN, Washington; E. H. HALL, Cambridge; W. D. BANCROFT, Ithaca; C. M. WOODWARD, St. Louis; I. C. RUSSELL, Ann Arbor; E. L. MARK, Cambridge; T. H. MACBRIDE, Iowa City; M. H. SAVILLE, New York; S. E. BALDWIN, New Haven; H. P. BOWDITCH, Cambridge; L. O. HOWARD, Washington; CH. WARDELL STILES, Washington; CHARLES S. HOWE, Cleveland; L. G. WELD, Iowa City; DAYTON C. MILLER, Cleveland; C. L. PARSONS, DURHAM; WM. T. MAGRUDER, Columbus; G. B. SHATTUCK, Baltimore; C. JUDSON HERRICK, Granville; F. E. LLOYD, New York; GEO. H. PEPPER, New York; J. F. CROWELL, Washington; F. S. LEE, New York; R. S. WOODWARD, New York.

From the Association at Large.—To hold over until successors are elected. A Fellow from each Section: J. M. VAN VLECK, Middletown; H. S. CARHART, Ann Arbor; F. W. CLARKE, Washington; J. F. HAYFORD, Washington; U. S. GRANT, Evanston; C. L. MARLATT, Washington; G. F. ATKINSON, Ithaca; W. J. MCGEE, St. Louis; MARCUS BENJAMIN, Washington; R. H. CHITTENDEN, New Haven.

Elected by the Council.—(For one year) J. MCK. CATTELL, U. S. GRANT, WM. KENT; (for two years) J. M. COULTER, A. A. NOYES, H. F. OSBORN; (for three years) FRANZ BOAS, E. L. NICHOLS, W. F. WILCOX.

From the Affiliated Societies.—American Chemical Society: JOHN H. LONG, WM. A. NOYES; Geological Society of America: N. H. WINCHELL, H. L. FAIRCHILD; Botanical Society of America: ARTHUR HOLLICK, H. M. RICHARDS; Society for the Promotion of Agricultural Science: W. J. BEAL, H. E. ALVORD; American Microscopical Society: J. C. SMITH, A. M. HOLMES; American Psychological Association: E. C. SANFORD; American Society of Naturalists: W. T. SEDGWICK; Association of Economic Entomologists: E. P. FELT, JAMES FLETCHER; American Anthropological Association: W. H. HOLMES, FRANZ BOAS; Astronomical and Astrophysical Society of America: C. L. DOOLITTLE, G. C. COMSTOCK; American Physical Society: A. G. WEBSTER, ERNEST MERRITT; Society of American Bacteriologists: W. H. WELCH.

Local Officers and Committees for the St. Louis Meeting.

HONORARY PRESIDENT.

DAVID R. FRANCIS.

President WM. TRELEASE.
First Vice-President C. M. WOODWARD.
Second Vice-President F. LOUIS SOLDAN.
Third Vice-President Dr. R. H. JESSE.
Secretary A. S. LANGSDORF.
Treasurer WM. H. THOMSON.

EXECUTIVE COMMITTEE.

WM. TRELEASE, *Chairman*.

GEO. H. MORGAN, *Secretary*.

W. S. CHAPLIN,	F. E. NIPHER,
WM. TAUSSIG,	H. C. TOWNSEND,
JOHN SCHROERS,	WM. H. THOMSON,
WALTER B. STEVENS,	A. S. LANGSDORF.

FINANCE COMMITTEE.

WM. H. THOMSON, *Chairman*.

MURRAY CARLETON,	CHAS. E. WARE,
JAS. G. GILMORE,	ARTHUR THACHER,
L. D. KINGSLAND,	C. H. HUTTIG,
H. DAUGHADAY,	J. H. DIECKMAN.

HALL AND ARRANGEMENTS FOR CONVENTION.

WM. TAUSSIG, *Chairman*.

HOWARD J. ROGERS,	W. S. CHAPLIN,
F. LOUIS SOLDAN,	W. J. S. BRYAN,
A. S. LANGSDORF,	S. LEAVETT.

LOCAL OFFICERS AND COMMITTEES FOR THE ST. LOUIS MEETING.

HOTELS AND BOARDING HOUSES.

WALTER B. STEVENS, *Chairman.*

W. F. SAUNDERS,	HENRY RUSTIN,
L. E. ANDERSON,	HANFORD CRAWFORD,
J. S. HIGGINS,	E. S. HOCH.

RECEPTION AND ENTERTAINMENT.

W. S. CHAPLIN, *Chairman.*

Prof. and Mrs. WM. TRELEASE,	Mr. and Mrs. W. H. BRYAN,
Gov. and Mrs. D. R. FRANCIS,	Mr. and Mrs. JOHN FOWLER,
Mr. and Mrs. J. L. MAURAN,	Mr. and Mrs. J. C. VAN BLARCOM,
Mr. and Mrs. F. D. HIRSCHBERG,	Miss MARY LIONBERGER,
ROBT. S. BROOKINGS,	Mr. and Mrs. G. O. CARPENTER,
THEOPHILE PAPIN,	Mr. and Mrs. W. H. LEE,
Mr. and Mrs. HIRAM PHILLIPS,	Mr. and Mrs. FESTUS J. WADE,
Mr. and Mrs. S. W. FORDYE, JR.,	Mr. and Mrs. JOHN SCHROERS,
Mr. and Mrs. G. D. MARKHAM,	Mr. and Mrs. CHARLES NAGEL,
Mr. and Mrs. JULIUS S. WALSH,	R. H. WHITELAW.
Mr. and Mrs. J. A. OCKERSON,	Mr. and Mrs. ADOLPHUS BUSCH,
Mr. and Mrs. G. C. HITCHCOCK,	Mr. and Mrs. E. R. HOYT,
Mr. and Mrs. T. H. MCKITTRICK,	Judge and Mrs. D. G. TAYLOR,
Prof. and Mrs. H. C. IVES,	Mr. and Mrs. J. D. CAPEN,
J. F. LEE,	Mrs. W. S. CHAPLIN.
E. S. ROBERT,	

PRESS AND PRINTING.

JOHN SCHROERS, *Chairman.*

HOWARD J. ROGERS,	OTTO HELLER,
JOS. A. GRAHAM,	BEN BLEWITT,
JOHN M. HARTELL,	JOHN F. MANGER,
E. C. ELIOT,	W. MARION REEDY,
JOHN L. VANORNUM,	H. M. WHELPLEY,
ARTHUR W. DOUGLAS,	ARTHUR O. LOVEJOY,
HENRY KING,	V. MOTH PORTER.
GEO. S. JOHNS,	

LOCAL OFFICERS AND COMMITTEES FOR THE ST. LOUIS MEETING.

TRANSPORTATION.

H. C. TOWNSEND, *Chairman.*

GEO. J. TANSEY, *Vice-Chairman.*

C. C. MCCARTHY,	J. M. CHESBROUGH,
C. S. CRANE,	J. M. BEALL,
D. H. MARTYN,	F. D. GILDERSLEVE,
E. W. LABEAUME,	D. BOWES,
G. B. ALLEN,	C. L. HILLEARY,
V. W. FISHER,	J. E. DAVENPORT,
W. STEELE,	GEO. MORTON,
BRYAN SNYDER,	L. W. WAKELEY,
A. HILTON,	E. A. WILLIAMS.
ED. KEANE,	

INCREASE IN MEMBERSHIP.

N. E. NIPHER, *Chairman.*

C. M. WOODWARD,	HERMAN VONSCHRENK.
-----------------	--------------------

Special Committees of the Association.¹

1. *Auditors.*

EMORY MCCLINTOCK, MORRISTOWN, and G. K. GILBERT, Washington.

2. *Committee on Indexing Chemical Literature.*

—————, *Chairman*, F. W. CLARKE, H. W. WILEY,
A. B. PRESCOTT, ALFRED TUCKERMAN.

3. *Committee on the Policy of the Association.*

THE PRESIDENT, *Chairman*, THE PERMANENT SECRETARY, THE
TREASURER, C. S. MINOT, H. L. FAIRCHILD, JAMES LEWIS HOWE.

4. *Committee on Standards of Measurements.*

T. C. MENDENHALL, *Chairman*, E. W. MORLEY, E. L. NICHOLS,
R. S. WOODWARD, H. S. CARHART. With power to add to its
number.

5. *Committee on the Association Library.*

F. W. CLARKE, *Chairman*, A. W. BUTLER, W. L. DUDLEY,
THOMAS FRENCH, JR.

6. *Committee on Anthropometric Measurements.*

J. MCK. CATTELL, W. W. NEWELL, W J MCGEE, FRANZ BOAS.

7. *Committee for the Collection of Information Relative to Forestry.*

W. H. BREWER, *Chairman*, GIFFORD PINCHOT, ARNOLD HAGUE.

8. *Committee on the Quantitative Study of Biological Variation.*

FRANZ BOAS, *Chairman*, J. MCK. CATTELL, C. S. MINOT, C. H.
EIGENMANN, C. B. DAVENPORT.

9. *Committee on the Protection and Preservation of Objects of Archaeological Interest.*

—————, *Chairman*, F. W. PUTNAM, N. H. WINCHELL,
G. K. GILBERT, A. W. BUTLER, GEORGE A. DORSEY.

10. *Committee on the Study of Blind Vertebrates.*

THEODORE GILL, *Chairman*, A. S. PACKARD, C. O. WHITMAN,
S. H. GAGE, H. C. BUMPUS, C. H. EIGENMANN.

¹ All Committees are expected to present their reports to the COUNCIL not later than the third day of the meeting. Committees sending their reports to the Permanent Secretary one month before a meeting can have them printed for use at the meeting.

SPECIAL COMMITTEES OF THE ASSOCIATION.

11. *Committee on the Teaching of Anthropology in America.*

W J MCGEE, *Chairman*, G. G. MACCURDY, FRANK RUSSELL,
FRANZ BOAS, W. H. HOLMES.

12. *Committee on the Relations of the Journal Science with the Association.*

SIMON NEWCOMB, *Chairman*, G. K. GILBERT, J. MCK. CATTELL,
THE PRESIDENT, THE PERMANENT SECRETARY.

13. *Committee on the Relations of Plants and Climate.*

WILLIAM TRELEASE, *Chairman*, D. T. MACDOUGAL, J. M.
COULTER.

14. *Committee on the Atomic Weight of Thorium.*

CHARLES BASKERVILLE, *Chairman*, F. P. VENABLE, JAMES
LEWIS HOWE.

15. *Committee on the Velocity of Light.*

W. S. FRANKLIN, *Chairman*, D. B. BRACE, E. F. NICHOLS.

MEETINGS AND OFFICERS OF THE ASSOCIATION OF AMERICAN GEOLOGISTS AND NATURALISTS.

Meeting.	Date.	Place.	Chairman.	Secretary.	Assistant Secretary.	Treasurer.
1st	April 2, 1840,	Philadelphia,	Edw. Hitchcock,*	L. C. Beck,*	{B. Silliman, Jr.,* {C. B. Trego,* {J. D. Whitney,* {M. B. Williams,*	
2d	April 5, 1841,	Philadelphia,	Benj. Silliman,*	L. C. Beck,*		
3d	April 25, 1842,	Boston,	S. G. Morton,*	C. T. Jackson,*		
4th	April 26, 1843,	Albany,	Henry D. Rogers,*	B. Silliman, Jr.,*		John Locke.*
5th	May 8, 1844,	Washington,	John Locke,*	{B. Silliman, Jr.,* {O. P. Hubbard,		Douglas Houghton.*
6th	April 30, 1845,	New Haven,	Wm. B. Rogers,*	{B. Silliman, Jr.,* {J. Law. Smith,*		Douglas Houghton.*
7th	Sept. 2, 1846,	New York,	C. T. Jackson,*	B. Silliman, Jr.,*		E. C. Herrick.*
8th	Sept. 20, 1847,	Boston,	Wm. B. Rogers,*†	Jeffries Wyman,*		B. Silliman, Jr.*

* Deceased.

† Professor Rogers, as chairman of this last meeting, called the first meeting of the new Association to order and presided until it was fully organized by the adoption of a constitution. As he was thus the first presiding officer of the new Association, it was directed at the Hartford meeting that his name be placed at the head of the Past Presidents of the American Association for the Advancement of Science.

Meetings	Place	Date	Members in attendance	Number of members
1	Philadelphia	Sept. 20, 1848	?	461
2	Cambridge	Aug. 14, 1849	?	540
3	Charleston	Mar. 12, 1850	?	622
4	New Haven	Aug. 19, 1850	?	704
5	Cincinnati	May 5, 1851	87	800
6	Albany	Aug. 19, 1851	194	769
7	Cleveland	July 28, 1853	?	940
8	Washington	April 26, 1854	168	1004
9	Providence	Aug. 15, 1855	166	605
10	2d Albany	Aug. 20, 1856	381	722
11	Montreal	Aug. 12, 1857	351	946
12	Baltimore	April 28, 1858	190	962
13	Springfield	Aug. 3, 1859	190	862
14	Newport	Aug. 1, 1860	135	644
15	Buffalo	Aug. 15, 1866	79	637
16	Burlington	Aug. 21, 1867	73	415
17	Chicago	Aug. 5, 1868	259	686
18	Salem	Aug. 18, 1869	244	511
19	Troy	Aug. 17, 1870	188	536
20	Indianapolis	Aug. 16, 1871	196	668
21	Dubuque	Aug. 15, 1872	164	610
22	Portland	Aug. 20, 1873	195	670
23	Hartford	Aug. 12, 1874	224	722
24	Detroit	Aug. 11, 1875	165	807
25	2d Buffalo	Aug. 23, 1876	215	867
26	Nashville	Aug. 29, 1877	173	953
27	St. Louis	Aug. 21, 1878	134	962
28	Saratoga	Aug. 27, 1879	256	1030
29	Boston	Aug. 25, 1880	997	1555
30	2d Cincinnati	Aug. 17, 1881	500	1699
31	2d Montreal	Aug. 23, 1882	937	1922
32	Minneapolis	Aug. 15, 1883	328	2033
33	2d Philadelphia	Sept. 3, 1884	1261*	1981
34	Ann Arbor	Aug. 26, 1885	364	1956
35	3d Buffalo	Aug. 18, 1886	445	1886
36	New York	Aug. 10, 1887	729	1956
37	2d Cleveland	Aug. 14, 1888	342	1964
38	Toronto	Aug. 26, 1889	424	1952
39	2d Indianapolis	Aug. 19, 1890	364	1944
40	2d Washington	Aug. 19, 1891	653†	2054
41	Rochester	Aug. 17, 1892	456	2037
42	Madison	Aug. 17, 1893	290	1939
43	Brooklyn	Aug. 15, 1894	488	1802
44	2d Springfield	Aug. 28, 1895	368	1913
45	4th Buffalo	Aug. 24, 1896	333	1890
46	2d Detroit	Aug. 9, 1897	283‡	1782
47	2d Boston	Aug. 22, 1898	903	1729
48	Columbus	Aug. 21, 1899	353	1721
49	2d New York	June 25, 1900	434	1925
50	Denver	Aug. 24, 1901	311	2703
51	Pittsburg	June 28 to July 3, 1902.	435	3473
52	3d Washington	Dec. 27, 1902, to Jan. 2, 1903.	975	3596

* Including 303 Members of the British Association and 9 other foreign guests.

† Including 24 Foreign Honorary Members for the meeting.

‡ Including 15 Foreign Honorary Members and Associates for the meeting.

Officers of the Meetings of the Association.

[The number before the name is that of the meeting; the year of the meeting follows the name; the asterisk after a name indicates that the member is deceased.]

PRESIDENTS.

1. { WM. B. ROGERS,* 1848.
W. C. REDFIELD,* 1848.
2. JOSEPH HENRY,* 1849.
3. { A. D. BACHE,* March
meeting, 1850, in the ab-
4. { sence of JOSEPH HENRY.*
August meeting, 1850.
5. { May meeting, 1851.
6. LOUIS AGASSIZ,* August
meeting, 1851.
(No meeting in 1852.)
7. BENJAMIN PIERCE,* 1853.
8. JAMES D. DANA,* 1854.
9. JOHN TORREY,* 1855.
10. JAMES HALL,* 1856.
{ ALEXIS CASWELL,* 1857,
11. { in place of J. W. BAILEY,*
deceased. 1858, in the ab-
12. { sence of JEFFRIES WYMAN.*
13. STEPHEN ALEXANDER,* 1859.
14. ISAAC LEA,* 1860.
(No meetings for 1861-65.)
15. F. A. P. BARNARD,* 1866.
16. J. S. NEWBERRY,* 1867.
17. B. A. GOULD,* 1868.
18. J. W. FOSTER,* 1869.
19. T. STERRY HUNT,* 1870,
in the absence of WM.
CHAUVENET.*
20. ASA GRAY,* 1871.
21. J. LAWRENCE SMITH,* 1872.
22. JOSEPH LOVERING,* 1873.
23. J. L. LeCONTE,* 1874.
24. J. E. HILGARD,* 1875.
25. WILLIAM B. ROGERS,* 1876.
26. SIMON NEWCOMB, 1877.
27. O. C. MARSH,* 1878.
28. G. F. BARKER, 1879.
29. LEWIS H. MORGAN,* 1880.
30. G. J. BRUSH, 1881.
31. J. W. DAWSON, 1882.
32. C. A. YOUNG, 1883.
33. J. P. LESLEY,* 1884.
34. H. A. NEWTON,* 1885.
35. EDWARD S. MORSE, 1886.
36. S. P. LANGLEY, 1887.
37. J. W. POWELL,* 1888.
38. T. C. MENDENHALL, 1889.
39. G. LINCOLN GOODALE, 1890.
40. ALBERT B. PRESCOTT, 1891.
41. JOSEPH LeCONTE,* 1892.
42. WILLIAM HARKNESS,* 1893.
43. DANIEL G. BRINTON,* 1894.
44. E. W. MORLEY, 1895.
{ EDWARD D. COPE,* 1896.
45. { THEODORE GILL, as senior
vice-president acted after
the death of Prof. COPE.
46. { WOLCOTT GIBBS, 1897, ab-
- sent. W J McGEE, Acting
President.
47. F. W. PUTNAM, 1898.
{ EDWARD ORTON,* 1899.
48. { GROVE K. GILBERT, elec-
- ted by the General Com-
- mittee December, 1899,
to fill the vacancy caused
by the death of Prof.
ORTON.
49. R. S. WOODWARD, 1900.
50. C. S. MINOT, 1901.
51. ASAPH HALL, 1902.
52. IRA REMSEN, 1903.
53. CARROLL D. WRIGHT, 1904.

OFFICERS OF THE MEETINGS OF THE ASSOCIATION.

VICE-PRESIDENTS.

There were no Vice-Presidents until the 11th meeting when there was a single Vice-President for each meeting. At the 24th meeting, the Association met in Sections A and B, each presided over by a Vice-President. At the 31st meeting nine sections were organized, each with a Vice-President as its presiding officer. In 1886 Section G (Microscopy) was given up. In 1892, Section F was divided into F, Zoology; G, Botany.

1857-1874.

- | | |
|--|--|
| 11. ALEXIS CASWELL,* 1857,
acted as President. | 17. CHAS. WHITTLESEY,* 1868.
18. OGDEN N. ROOD, 1869. |
| 12. JOHN E. HOLBROOK,* 1858,
not present. | 19. T. STERRY HUNT,* 1870,
acted as President. |
| 13. EDWARD HITCHCOCK,* 1859. | 20. G. F. BARKER, 1871. |
| 14. B. A. GOULD,* 1860. | 21. ALEX. WINCHELL,* 1872, |
| 15. B. A. GOULD,* 1866, in the
absence of R. W. GIBBES. | 22. A. H. WORTHEN,* 1873.
not present. |
| 16. WOLCOTT GIBBS, 1867. | 23. C. S. LYMAN,* 1874. |

1875-1881.

Section A.—Mathematics, Physics, and Chemistry.

24. H. A. NEWTON,* 1875.
25. C. A. YOUNG, 1876.
26. R. H. THURSTON, 1877,
in the absence of E. C.
PICKERING.
27. R. H. THURSTON, 1878.
28. S. P. LANGLEY, 1879.
29. ASAPH HALL, 1880.
30. WM. HARKNESS,* 1881, in
the absence of A.M.MAYER.*

Section B.—Natural History.

24. J. W. DAWSON, 1875.
25. EDWARD S. MORSE, 1876.
26. O. C. MARSH,* 1877.
27. AUG. R. GROTE, 1878.
28. J. W. POWELL,* 1879.
29. ALEX. AGASSIZ, 1880.
30. EDWARD T. COX, 1881, in
the absence of GEORGE
ENGELMANN.*

CHAIRMEN OF SUBSECTIONS, 1875-1881.

Subsection of Chemistry.

24. S. W. JOHNSON, 1875.
25. G. F. BARKER, 1876.
26. N. T. LUPTON,* 1877.
27. F. W. CLARKE, 1878.
28. F. W. CLARKE, 1879, in the
absence of IRA REMSEN.
29. J. M. ORDWAY, 1880.
30. G. C. CALDWELL, 1881, in
the absence of W. R.
NICHOLS.*

Subsection of Microscopy.

25. R. H. WARD, 1876.
26. R. H. WARD, 1877.
27. R. H. WARD, 1878, in the
absence of G. S. BLACKIE.*

28. E. W. MORLEY, 1879.

29. S. A. LATTIMORE, 1880.

30. A. B. HERVEY, 1881.

Subsection of Anthropology.

24. LEWIS H. MORGAN,* 1875.
25. LEWIS H. MORGAN,* 1876.
26. DANIEL WILSON,* 1877, not
present.

27. United with Section B.

28. DANIEL WILSON,* 1879.

29. J. W. POWELL,* 1880.

30. GARRICK MALLERY,* 1881.

Subsection of Entomology.

30. J. G. MORRIS,* 1881.

OFFICERS OF THE MEETINGS OF THE ASSOCIATION.

VICE-PRESIDENTS OF SECTIONS, 1882-

Section A.—*Mathematics and Astronomy.*

31. W. A. ROGERS,* 1882, in the absence of WM. HARKNESS.*
32. W. A. ROGERS,* 1883.
33. H. T. EDDY, 1884.
34. WM. HARKNESS,* 1885, in the absence of J. M. VAN VLECK.
35. J. W. GIBBS,* 1886.
36. J. R. EASTMAN, 1887, in place of W. FERREL,* res'd.
37. ORMOND STONE, 1888.
38. R. S. WOODWARD, 1889.
39. S. C. CHANDLER, 1890.
40. E. W. HYDE, 1891.
41. J. R. EASTMAN, 1892.
42. C. L. DOOLITTLE, 1893.
43. { G. C. COMSTOCK, 1894.
EDGAR FRISBY, 1894.
44. EDGAR FRISBY, 1895, in place of E. H. HOLDEN, resigned.
45. ALEX. MACFARLANE, 1896, in place of WM. E. STORY, resigned.
46. W. W. BEMAN, 1897.
47. E. E. BARNARD, 1898.
48. ALEX. MACFARLANE, 1899.
49. ASAPH HALL, JR., 1900.
50. JAMES MACMAHON, 1901.
51. G. W. HOUGH, 1902.
52. GEORGE BRUCE HALSTED, 1903.
53. O. H. TITTMANN, 1904.

Section B.—*Physics.*

31. T. C. MENDENHALL, 1882.
32. H. A. ROWLAND,* 1883.
33. J. TROWBRIDGE, 1884.
34. S. P. LANGLEY, 1885, in place of C. F. BRACKETT, res'd.
35. C. F. BRACKETT, 1886.
36. W. A. ANTHONY, 1887.
37. A. A. MICHELSON, 1888.
38. H. S. CARHART, 1889.

39. CLEVELAND ABBE, 1890.
40. F. E. NIPHER, 1891.
41. B. F. THOMAS, 1892.
42. E. L. NICHOLS, 1893.
43. WM. A. ROGERS, 1894.
44. W. LECONTE STEVENS, 1895.
45. CARL LEO MEES, 1896.
46. CARL BARUS, 1897.
47. F. P. WHITMAN, 1898.
48. ELIHU THOMSON, 1899.
49. ERNEST MERRITT, 1900.
50. D. B. BRACE, 1901.
51. W. S. FRANKLIN, 1902.
52. ERNEST F. NICHOLS, 1903.
53. E. H. HALL, 1904.

Section C.—*Chemistry.*

31. H. C. BOLTON,* 1882.
32. E. W. MORLEY, 1883.
33. J. W. LANGLEY, 1884.
34. N. T. LUPTON,* 1885, in the absence of W. R. NICHOLS.
35. H. W. WILEY, 1886.
36. A. B. PRESCOTT, 1887.
37. C. E. MUNROE, 1888.
38. W. L. DUDLEY, 1889.
39. R. B. WARDER, 1890.
40. R. C. KEDZIE, 1891.
41. ALFRED SPRINGER, 1892.
42. EDWARD HART, 1893.
43. T. H. NORTON, 1894.
44. WM. MCMURTRIE, 1895.
45. W. A. NOYES, 1896.
46. W. P. MASON, 1897.
47. EDGAR F. SMITH, 1898.
48. F. P. VENABLE, 1899.
49. JAS. LEWIS HOWE, 1900.
50. JOHN H. LONG, 1901.
51. H. A. WEBER, 1902.
52. CHARLES BASKERVILLE, 1903.
53. W. D. BANCROFT, 1904.

Section D.—*Mechanical Science and Engineering.*

31. W. P. TROWBRIDGE,* 1882.

OFFICERS OF THE MEETINGS OF THE ASSOCIATION.

VICE-PRESIDENTS OF SECTIONS, CONTINUED.

32. DEVOLSON WOOD, 1883, absent, but place was not filled.
 33. R. H. THURSTON,* 1884.
 34. J. BURKITT WEBB, 1885.
 35. O. CHANUTE, 1886.
 36. E. B. COXE, 1887.
 37. C. J. H. WOODBURY, 1888.
 38. JAMES E. DENTON, 1889.
 39. JAMES E. DENTON, 1890, in place of A. BEARDSLEY, absent.
 40. THOMAS GRAY, 1891.
 41. J. B. JOHNSON, 1892.
 42. S. W. ROBINSON, 1893.
 43. MANSFIELD MERRIMAN, 1894.
 44. WILLIAM KENT, 1895.
 45. FRANK O. MARVIN, 1896.
 46. JOHN GALBRAITH, 1897.
 47. JOHN GALBRAITH, 1898, in the absence of M. E. COOLEY.
 48. STORM BULL, 1899.
 49. JOHN A. BRASHEAR, 1900.
 50. H. S. JACOBY, 1901.
 51. J. J. FLATHER, 1902.
 52. CLARENCE A. WALDO, 1903.
 53. C. M. WOODWARD, 1904.
- Section D.—Mechanical Science and Engineering, continued.*
40. THOMAS GRAY, 1891.
 41. J. B. JOHNSON, 1892.
 42. S. W. ROBINSON, 1893.
 43. MANSFIELD MERRIMAN, 1894.
 44. WILLIAM KENT, 1895.
 45. FRANK O. MARVIN, 1896.
 46. JOHN GALBRAITH, 1897.
 47. JOHN GALBRAITH, 1898, in the absence of M. E. COOLEY.
 48. STORM BULL, 1899.
 49. JOHN A. BRASHEAR, 1900.
 50. H. S. JACOBY, 1901.
 51. J. J. FLATHER, 1902.
 52. CLARENCE A. WALDO, 1903.
 53. C. M. WOODWARD, 1904.
- Section E.—Geology and Geography.*
31. E. T. COX, 1882.
 32. C. H. HITCHCOCK, 1883.
 33. N. H. WINCHELL, 1884.
 34. EDWARD ORTON,* 1885.
 35. T. C. CHAMBERLIN, 1886.
 36. G. K. GILBERT, 1887.
 37. GEORGE H. COOK,* 1888.
 38. CHARLES A. WHITE, 1889.
 39. JOHN C. BRANNER, 1890.
 40. J. J. STEVENSON, 1891.
 41. H. S. WILLIAMS, 1892.
 42. CHARLES D. WALCOTT, 1893.
 43. SAMUEL CALVIN, 1894.
 44. JED. HOTCHKISS, 1895.
45. B. K. EMERSON, 1896.
 46. { I. C. WHITE, 1897.
E. W. CLAYPOLE,* 1897.
 47. H. L. FAIRCHILD, 1898.
 48. J. F. WHITEAVES, 1899.
 49. J. F. KEMP, 1900.
 50. C. R. VAN HISE, 1901.
 51. JOSEPH A. HOLMES, 1902, in the absence of O. A. DERBY.
 52. WM. M. DAVIS, 1903.
 53. I. C. RUSSELL, 1904.
- Section F.—Biology, 1882-1892.*
31. W. H. DALL, 1882.
 32. W. J. BEAL, 1883.
 33. E. D. COPE,* 1884.
 34. T. J. BURRILL, 1885, in the absence of B. G. WILDER.
 35. H. P. BOWDITCH, 1886.
 36. W. G. FARLOW, 1887.
 37. C. V. RILEY,* 1888.
 38. GEORGE L. GOODALE, 1889.
 39. C. S. MINOT, 1890.
 40. J. M. COULTER, 1891.
 41. S. H. GAGE, 1892.
- Section F.—Zoology.*
42. HENRY F. OSBORN, 1893.
 43. J. A. LINTNER,* 1894, in place of S. H. SCUDDER, resigned.
 44. L. O. HOWARD, 1895, in place of D. S. JORDAN, res'd.
 45. THEO. GILL, 1896.
 46. L. O. HOWARD, 1897, in place of G. BROWN GOODE,* deceased.
 47. A. S. PACKARD, 1898.
 48. S. H. GAGE, 1899.
 49. C. B. DAVENPORT, 1900.
 50. D. S. JORDAN, 1901.
 51. E. L. MARK, 1902, in the absence of C. C. NUTTING.
 52. C. W. HARGITT, 1903.
 53. E. L. MARK, 1904.

OFFICERS OF THE MEETINGS OF THE ASSOCIATION.

VICE-PRESIDENTS OF SECTIONS, CONTINUED.

Section G. Microscopy, 1882-85.

- | | |
|---------------------------|-----------------------------|
| 31. A. H. TUTTLE, 1882. | 48. THOMAS WILSON,* 1899. |
| 32. J. D. COX, 1883. | 49. A. W. BUTLER, 1900. |
| 33. T. G. WORMLEY,* 1884. | 50. J. WALTER FEWKES, 1901. |
| 34. S. H. GAGE, 1885. | 51. STEWART CULIN, 1902. |
| | 52. GEO. A. DORSEY, 1903. |

(Section united with F in 1886)

Section G.—Botany.

- | | |
|---|--------------------------|
| 42. CHARLES E. BESSEY, 1893. | |
| 43. { L. M. UNDERWOOD, 1894. | 53. M. H. SAVILLE, 1904. |
| { C. E. BESSEY, 1894. | |
| 44. J. C. ARTHUR, 1895. | |
| 45. N. L. BRITTON, 1896. | |
| 46. G. F. ATKINSON, 1897. | |
| 47. W. G. FARLOW, 1898. | |
| 48. C. R. BARNES, 1899. | |
| 49. W. TRELEASE, 1900. | |
| 50. B. T. GALLOWAY, 1901. | |
| 51. C. E. BESSEY, 1902, in the
absence of D. H. CAMP-
BELL. | |
| 52. F. V. COVILLE, 1903. | |
| 53. T. H. MACBRIDE, 1904. | |

Section H.—Anthropology.

- | | |
|---|--|
| 31. ALEX. WINCHELL,* 1882. | 31. E. B. ELLIOTT,* 1882. |
| 32. OTIS T. MASON, 1883. | 32. FRANKLIN B. HOUGH,* 1883. |
| 33. EDWARD S. MORSE, 1884. | 33. JOHN EATON,* 1884. |
| 34. J. OWEN DORSEY,* 1885,
in the absence of W. H. DALL. | 34. EDWARD ATKINSON, 1885. |
| 35. HORATIO HALE,* 1886. | 35. JOSEPH CUMMINGS,* 1886. |
| 36. D. G. BRINTON,* 1887. | 36. H. E. ALVORD, 1887. |
| 37. CHARLES C. ABBOTT, 1888. | 37. CHARLES W. SMILEY, 1888. |
| 38. GARRICK MALLERY,* 1889. | 38. CHARLES S. HILL, 1889. |
| 39. FRANK BAKER, 1890. | 39. J. RICHARDS DODGE, 1890. |
| 40. JOSEPH JASTROW, 1891. | 40. EDMUND J. JAMES, 1891. |
| 41. W. H. HOLMES, 1892. | 41. L. F. WARD, 1892, in place
of S. D. HORTON,* resigned. |
| 42. J. OWEN DORSEY,* 1893. | 42. WILLIAM H. BREWER, 1893. |
| 43. FRANZ BOAS, 1894. | 43. HENRY FARQUHAR, 1894. |
| 44. F. H. CUSHING,* 1895. | 44. B. E. FERNOW, 1895. |
| 45. ALICE C. FLETCHER, 1896. | 45. W. L. LAZENBY, 1896. |
| 46. W J MCGEE, 1897. | 46. R. T. COLBURN, 1897. |
| 47. J. MCK. CATTELL, 1898. | 47. ARCHIBALD BLUE, 1898. |
| | 48. MARCUS BENJAMIN, 1899. |
| | 49. MARCUS BENJAMIN, 1900,
in the absence of C. M.
WOODWARD. |
| | 50. JOHN HYDE, 1901. |
| | 51. JOHN HYDE, 1902, in the ab-
sence of CARROLL D. WRIGHT. |
| | 52. H. T. NEWCOMB, 1903. |
| | 53. SIMEON E. BALDWIN, 1904. |

Section I.—Social and Economic Science.

- ### *Section K.—Physiology and Ex- perimental Medicine.*

- | |
|---------------------------|
| 51. W. H. WELCH, 1902. |
| 52. W. H. WELCH, 1903. |
| 53. H. P. BOWDITCH, 1904. |

SECRETARIES.

General Secretaries, 1848-

1. WALTER R. JOHNSON,* 1848
2. E. N. HORSFORD,* 1849, in the absence of JEFFRIES WYMAN.*
3. L. R. GIBBS, 1850, in the absence of E. C. HERRICK.*
4. E. C. HERRICK,* 1850.
5. WM. B. ROGERS,* 1851, in the absence of E. C. HERRICK.
6. WM. B. ROGERS,* 1851.
7. S. ST. JOHN,* 1853, in the absence of J. D. DANA.*
8. J. LAWRENCE SMITH,* 1854.
9. WOLCOTT GIBBS, 1855.
10. B. A. GOULD,* 1856.
11. JOHN L. LECONTE,* 1857.
12. W.M.GILLESPIE,*1858,in the absence of WM. CHAUVENET.*
13. WM. CHAUVENET,* 1859.
14. JOSEPH LECONTE,* 1860.
15. ELIAS LOOMIS,* 1866, in the absence of W. P. TROWBRIDGE.*
16. C. S. LYMAN,* 1867.
17. SIMON NEWCOMB, 1868, in the absence of A.P. ROCKWELL.
18. O. C. MARSH,* 1869.
19. F. W. PUTNAM, 1870, in the absence of C. F. HARTT.*
20. F. W. PUTNAM, 1871.
21. EDWARD S. MORSE, 1872.
22. C. A. WHITE, 1873.
23. A. C. HAMLIN, 1874.
24. S. H. SCUDDER, 1875.
25. T. C. MENDENHALL, 1876.
26. AUG. R. GROTE, 1877.
27. H. C. BOLTON,* 1878.
28. H. C. BOLTON,* 1879, in the absence of GEORGE LITTLE.
29. J. K. REES, 1880.
30. C. V. RILEY,* 1881.
31. WILLIAM SAUNDERS, 1882.
32. J. R. EASTMAN, 1883.
33. ALFRED SPRINGER, 1884.
34. C. S. MINOT, 1885.
35. S. G. WILLIAMS,* 1886.
36. WILLIAM H. PETTEE, 1887.
37. JULIUS POHLMAN, 1888.
38. C. LEO MEES, 1889.
39. H. C. BOLTON,* 1890.
40. H. W. WILEY, 1891.
41. A. W. BUTLER, 1892.
42. T. H. NORTON, 1893.
43. H. L. FAIRCHILD, 1894.
44. JAS. LEWIS HOWE, 1895.
45. CHARLES R. BARNES, 1896.
46. ASAPH HALL, JR., 1897.
47. J. McMAHON, 1898, in place of D.S.KELLCOTT,*deceased.
48. F. BEDELL, 1899.
49. CHAS. BASKERVILLE, 1900.
50. JOHN M. COULTER, 1901, in the absence of WILLIAM HALLOCK.
51. D. T. MACDOUGAL, 1902.
52. HENRY B. WARD, 1903.
53. C. W. STILES, 1904.

Permanent Secretaries, 1851-
5-7. SPENCER F. BAIRD,*1851-4
8-17. JOSEPH LOVERING,*1854-68.

18. F. W. PUTNAM, 1869, in the absence of J. LOVERING.*
- 19-21. JOSEPH LOVERING,* 1870-73.

- 22-46. F. W. PUTNAM, 1873-98.
 - 47-54. L. O. HOWARD, 1898-05.
- Assistant General Secretaries, 1882-1887.*

31. J. R. EASTMAN, 1882.
32. ALFRED SPRINGER, 1883.
33. C. S. MINOT, 1884, in the absence of E. S. HOLDEN.
34. S.G.WILLIAMS,* 1885, in the absence of C. C. ABBOTT.

OFFICERS OF THE MEETINGS OF THE ASSOCIATION.

SECRETARIES, CONTINUED.

- | | |
|--|--|
| 35. W. H. PETTEE, 1886. | <i>Secretaries of Section A.—Mathematics, Physics and Chemistry,</i> |
| 36. J. C. ARTHUR, 1887. | 1875–1881. |
| <i>Secretaries of the Council, 1888–</i> | |
| 37. C. LEO MEES, 1888. | 24. { S. P. LANGLEY, 1875. |
| 38. H. C. BOLTON,* 1889. | { T. C. MENDENHALL, 1875. |
| 39. H. W. WILEY, 1890. | 25. A. W. WRIGHT, 1876. |
| 40. A. W. BUTLER, 1891. | 26. H. C. BOLTON,* 1877. |
| 41. T. H. NORTON, 1892. | 27. F. E. NIPHER, 1878. |
| 42. H. LEROY FAIRCHILD, 1893. | 28. J. K. REES, 1879. |
| 43. JAS. LEWIS HOWE, 1894. | 29. H. B. MASON, 1880. |
| 44. CHARLES R. BARNES, 1895. | 30. E. T. TAPPAN, 1881, in the ab- |
| 45. ASAPH HALL, JR., 1896. | sence of JNO. TROWBRIDGE. |
| 46. D. S. KELLICOTT,* 1897. | <i>Secretaries of Section B.—Nat-</i> |
| 47. FREDERICK BEDELL, 1898. | <i>ural History, 1874–1881.</i> |
| 48. CHARLES BASKERVILLE, 1899. | 24. EDWARD S. MORSE, 1875. |
| 49. WILLIAM HALLOCK, 1900. | 25. ALBERT H. TUTTLE, 1876. |
| 50. D. T. MACDOUGAL, 1901. | 26. WILLIAM H. DALL, 1877. |
| 51. H. B. WARD, 1902. | 27. GEORGE LITTLE, 1878. |
| 52. CH. WARDELL STILES, 1903. | 28. WM. H. DALL, 1879, in the |
| 53. CHAS. S. HOWE, 1904. | absence of A. C. WETHERBY. |
| | 29. CHARLES V. RILEY,* 1880. |
| | 30. WILLIAM SAUNDERS, 1881. |

SECRETARIES OF SUBSECTIONS, 1875–1881.

- | | |
|------------------------------------|----------------------------------|
| <i>Subsection of Chemistry.</i> | 25. OTIS T. MASON, 1876. |
| 24. F. W. CLARKE, 1875. | 26, 27. United with Section B. |
| 25. H. C. BOLTON,* 1876. | 28, 29, 30. J. G. HENDERSON, |
| 26. P. SCHWEITZER, 1877. | 1879–81. |
| 27. A. P. S. STUART, 1878. | <i>Subsection of Microscopy.</i> |
| 28. W. R. NICHOLS,* 1879. | 25. E. W. MORLEY, 1876. |
| 29. C. E. MUNROE, 1880. | 26. T. O. SOMMERS, JR., 1877. |
| 30. ALFRED SPRINGER, 1881, in | 27. G. J. ENGELMANN, 1878. |
| the absence of R. B. WARDER. | 28, 29. A. B. HERVEY, 1879–80. |
| <i>Subsection of Entomology.</i> | 30. W. H. SEAMAN, 1881, in the |
| 30. B. P. MANN, 1881. | absence of S. P. SHARPLES. |
| <i>Subsection of Anthropology.</i> | |
| 24. F. W. PUTNAM, 1875. | |

SECRETARIES OF THE SECTIONS, 1882–

- | | |
|-----------------------------------|----------------------------|
| <i>Section A.—Mathematics and</i> | 33. G. W. HOUGH, 1884. |
| <i>Astronomy.</i> | 34. E. W. HYDE, 1885. |
| 31. H. T. EDDY, 1882. | 35. S. C. CHANDLER, 1886. |
| 32. G. W. HOUGH, 1883, in the | 36. H. M. PAUL, 1887. |
| absence of W. W. JOHNSON. | 37. C. C. DOOLITTLE, 1888. |

OFFICERS OF THE MEETINGS OF THE ASSOCIATION.

SECRETARIES OF THE SECTIONS, CONTINUED.

38. G. C. COMSTOCK, 1889.
 39. W. W. BEMAN, 1890.
 40. F. H. BIGELOW, 1891.
 41. WINSLOW UPTON, 1892.
 42. C. A. WALDO, 1893, in the absence of A. W. PHILLIPS.
 43. J. C. KERSHNER, 1894, in place of W. W. BEMAN, res'd.
 44. ASAPH HALL, JR., 1895, in place of E. H. MOORE, res'd.
 45. EDWIN B. FROST, 1896.
 46. JAMES MCMAHON, 1897.
 47. WINSLOW UPTON, 1898, in place of ALEX. ZIWET, resigned.
 48. JOHN F. HAYFORD, 1899.
 49. W. M. STRONG, 1900.
 50. G. A. MILLER, 1901, in place of H. C. LORD, resigned.
 51. E. S. CRAWLEY, 1902.
 52. C. S. HOWE, 1903.
 53. L. G. WELD, 1904.
- Section B.—Physics.*
31. C. S. HASTINGS, 1882.
 32. F. E. NIPHER, 1883, in the absence of C. K. WEAD.
 33. N. D. C. HODGES, 1884.
 34. B. F. THOMAS, 1885, in place of A. A. MICHELSON, resigned.
 35. H. S. CARHART, 1886.
 36. C. LEO MEES, 1887.
 37. ALEX. MACFARLANE, 1888.
 38. E. L. NICHOLS, 1889.
 39. E. M. AVERY, 1890.
 40. ALEX. MACFARLANE, 1891.
 41. BROWN AYRES, 1892.
 42. W. LeCONTE STEVENS, 1893.
 43. B. W. SNOW, 1894.
 44. E. MERRITT, 1895.
 45. FRANK P. WHITMAN, 1896.
 46. FREDERICK BEDELL, 1897.
 47. W. S. FRANKLIN, 1898, in place of E. B. ROSA, resigned.
 48. WILLIAM HALLOCK, 1899.
49. R. A. FESSENDEN, 1900.
 50. JOHN ZELENY, 1901, in place of J. O. REED, resigned.
 51. E. F. NICHOLS, 1902.
 52. D. C. MILLER, 1903.
 53. D. C. MILLER, 1904.
- Section C.—Chemistry.*
31. ALFRED SPRINGER, 1882.
 32. { J. W. LANGLEY, 1883.
W. McMURTRIE, 1883.
 33. H. CARMICHAEL, 1884, in the absence of R. B. WARDER.
 34. F. P. DUNNINGTON, 1885.
 35. W. McMURTRIE, 1886.
 36. C. F. MABERY, 1887.
 37. W. L. DUDLEY, 1888.
 38. EDWARD HART, 1889.
 39. W. A. NOYES, 1890.
 40. T. H. NORTON, 1891.
 41. JAS. LEWIS HOWE, 1892.
 42. H. N. STOKES, 1893, in the absence of J. U. NEF.
 43. MORRIS LOEB, 1894, in place of S. M. BABCOCK, resigned.
 44. { W. P. MASON, 1895.
W. O. ATWATER, 1895.
 45. FRANK P. VENABLE, 1896.
 46. P. C. FREER, 1897.
 47. C. BASKERVILLE, 1898.
 48. H. A. WEBER, 1899.
 49. A. A. NOYES, 1900.
 50. W. MCPHERSON, 1901.
 51. F. C. PHILLIPS, 1902.
 52. H. N. STOKES, 1903.
 53. CHAS. L. PARSONS, 1904.
- Section D.—Mechanical Science and Engineering.*
31. J. BURKITT WEBB, 1882, in the absence of C. B. DUDLEY.
 32. J. BURKITT WEBB, 1883, *pro tempore*.
 33. J. BURKITT WEBB, 1884.
 34. C. J. H. WOODBURY, 1885.
 35. WILLIAM KENT, 1886.

OFFICERS OF THE MEETINGS OF THE ASSOCIATION.

SECRETARIES OF THE SECTIONS, CONTINUED.

36. G. M. BOND, 1887.
 37. ARTHUR BEARDSLEY, 1888.
 38. W. B. WARNER, 1889.
 39. THOMAS GRAY, 1890.
 40. WILLIAM KENT, 1891.
 41. O. H. LANDRETH, 1892.
 42. D. S. JACOBUS, 1893.
 43. JOHN H. KINEALY, 1894.
 44. H. S. JACOBY, 1895.
 45. JOHN GALBRAITH, 1896.
 46. JOHN J. FLATHER, 1897.
 47. JOHN J. FLATHER, 1898, in the absence of W. S. ALDRICH.
 48. J. M. PORTER, 1899.
 49. W. T. MAGRUDER, 1900.
 50. C. W. COMSTOCK, 1901, in the absence of W. H. JAQUES.
 51. C. A. WALDO, 1902.
 52. ELWOOD MEAD, 1903, in the absence of ALBERT KINGSBURY.
 53. W. T. MAGRUDER, 1904.
- Section E.—Geology and Geography.*
31. H. S. WILLIAMS, 1882, in the absence of C. E. DUTTON.
 32. A. A. JULIEN, 1883.
 33. E. A. SMITH, 1884.
 34. G. K. GILBERT, 1885, in the absence of H. C. LEWIS.*
 35. E. W. CLAYPOLE,* 1886.
 36. W. M. DAVIS, 1887, in the absence of T. B. COMSTOCK.
 37. JOHN C. BRANNER, 1888.
 38. JOHN C. BRANNER, 1889.
 39. SAMUEL CALVIN, 1890.
 40. W J MCGEE, 1891.
 41. R. D. SALISBURY, 1892.
 42. W. H. HOBBS,* 1893, in place of R. T. HILL, resigned.
 43. JED. HOTCHKISS,* 1894, in place of W. M. DAVIS, res'd
 44. J. PERRIN SMITH, 1895.
 45. W. N. RICE, 1896, in place of A. C. GILL, resigned.
 46. C. H. SMITH, JR., 1897.
 47. WARREN UPHAM, 1898.
 48. ARTHUR HOLLICK, 1899.
 49. J. A. HOLMES, 1900.
 50. H. B. PATTON, 1901, in the absence of R. A. F. PENROSE.
 51. F. P. GULLIVER, 1902.
 52. E. O. HOVEY, 1903.
 53. G. B. SHATTUCK, 1904.
- Section F.—Biology, 1882-1892.*
31. WILLIAM OSLER, 1882, in the absence of C. S. MINOT.
 32. S. A. FORBES, 1883.
 33. C. E. BESSEY, 1884.
 34. J. A. LINTNER,* 1885, in place of C. H. FERNALD, res'd.
 35. J. C. ARTHUR, 1886.
 36. J. H. COMSTOCK, 1887.
 37. B. E. FERNOW, 1888.
 38. A. W. BUTLER, 1889.
 39. J. M. COULTER, 1890.
 40. A. J. COOK, 1891.
 41. D. B. HALSTEAD, 1892.
- Section F.—Zoology.*
42. L. O. HOWARD, 1893.
 43. JOHN B. SMITH, 1894, in place of WM. LIBBY, JR., resigned.
 44. C. W. HARGITT, 1895, in place of S. A. FORBES, res'd.
 45. D. S. KELLICOTT,* 1896.
 46. C. C. NUTTING, 1897.
 47. R. T. JACKSON, 1898, in place of C. W. STILES, resigned.
 48. C. L. MARLATT, 1899, in place of F. W. TRUE, resigned.
 49. C. H. EIGENMANN, 1900.
 50. H. B. WARD, 1901.
 51. C. W. STILES, 1902.
 52. C. J. HERRICK, 1903.
 53. C. J. HERRICK, 1904.
- Section G.—Microscopy, 1882-85.*
31. ROBERT BROWN, JR., 1882.

OFFICERS OF THE MEETINGS OF THE ASSOCIATION.

SECRETARIES OF THE SECTIONS, CONTINUED.

32. CARL SEILER, 1883.
33. ROMYN HITCHCOCK, 1884.
34. W. H. WALMSLEY, 1885.
Section G.—Botany.
42. B. T. GALLOWAY, 1893, in
the absence of F. V. COVILLE.
43. CHAS. R. BARNES, 1894.
44. { B. T. GALLOWAY, 1895.
M. B. WAITE, 1895.
45. GEORGE F. ATKINSON, 1896.
46. F. C. NEWCOMBE, 1897.
47. ERWIN F. SMITH, 1898.
48. W. A. KELLERMAN, 1899.
49. D. T. MACDOUGAL, 1900.
50. ERNST A. BESSEY, 1901, in the
absence of A. S. HITCHCOCK.
51. H. VON SCHRENK, 1902.
52. C. J. CHAMBERLAIN, 1903.
53. F. E. LLOYD, 1904.
Section H.—Anthropology.
31. OTIS T. MASON, 1882.
32. G. H. PERKINS, 1883.
33. G. H. PERKINS, 1884, in the
absence of W. H. HOLMES.
34. ERMINNIE A. SMITH,* 1885.
35. A. W. BUTLER, 1886.
36. CHAS. C. ABBOTT, 1887, in the
absence of F. W. LANGDON.
37. FRANK BAKER, 1888.
38. W. M. BEAUCHAMP, 1889.
39. JOSEPH JASTROW, 1890.
40. W. H. HOLMES, 1891.
41. W. M. BEAUCHAMP, 1892, in
place of S. CULIN, resigned.
42. W. K. MOOREHEAD, 1893.
43. A. F. CHAMBERLIN, 1894.
44. { STEWART CULIN and W.
W. TOOKER, 1895, in place
of ANITA N. MCGEE, res'd.
45. G. H. PERKINS, 1896, in
place of J. G. BOURKE,* dec'd.
46. ANITA N. MCGEE, 1897, in
place of HARLAN I. SMITH,
resigned.
47. MARSHALL H. SAVILLE, 1898.
48. E. W. SCRIPTURE, 1899, in
place of GEO. A. DORSEY,
resigned.
49. FRANK RUSSELL, 1900.
50. G. G. MACCURDY, 1901.
51. HARLAN I. SMITH, 1902.
52. R. B. DIXON, 1903.
53. GEO. H. PEPPER.
*Section I.—Social and Economic
Science.*
31. { FRANKLIN B. HOUGH,* 1882.
J. RICHARDS DODGE, 1882.
32. JOSEPH CUMMINGS,* 1883.
33. CHARLES W. SMILEY, 1884.
34. CHAS. W. SMILEY, 1885, in
the absence of J. W. CHICKER-
ING.
35. H. E. ALVORD, 1886.
36. W. R. LAZENBY, 1887.
37. CHARLES S. HILL, 1888.
38. J. RICHARDS DODGE, 1889.
39. B. E. FERNOW, 1890.
40. B. E. FERNOW, 1891.
41. HENRY FARQUHAR, 1892, in
place of L. F. WARD, made
Vice-President.
42. NELLIE S. KEDZIE, 1893.
43. MANLEY MILES, 1894.
44. W. R. LAZENBY, 1895, in
place of E. A. ROSS, resigned.
45. R. T. COLBURN, 1896.
46. ARCHIBALD BLUE, 1897.
47. MARCUS BENJAMIN, 1898.
48. CALVIN M. WOODWARD, 1899.
49. H. T. NEWCOMB, 1900.
50. R. A. PEARSON, 1901, in
place of CORA A. BENNESON,
resigned.
51. F. R. RUTTER, 1902, in
place of Walter F. Willcox,
resigned.
52. F. H. HITCHCOCK, 1903.
53. J. F. CROWELL, 1904.

OFFICERS OF THE MEETINGS OF THE ASSOCIATION.

SECRETARIES OF THE SECTIONS, CONTINUED.

- Section K.—Physiology and Experimental Medicine.*
- | |
|----------------------|
| 52. F. S. LEE, 1903. |
| 53. F. S. LEE, 1904. |
| 51. F. S. LEE, 1902. |

TREASURERS.

- | | |
|--|---------------------------------------|
| 1. JEFFRIES WYMAN,* 1848. | 9-19. A. L. ELWYN,* 1855- |
| 2. A. L. ELWYN,* 1849. | 1870. |
| 3. ST. J. RAVENEL,* 1850, in the
absence of A. L. ELWYN.* | 20-30. WM. S. VAUX,* 1871-
1881. |
| 4. A. L. ELWYN,* 1850. | 32-42. WM. LILLY,* 1882-93. |
| 5. SPENCER F. BAIRD,* 1851,
in the absence of A. L. ELWYN.* | 43-49. R. S. WOODWARD, 1894-
1900. |
| 6-7. A. L. ELWYN,* 1851-53. | 50-54. R. S. WOODWARD, 1901- |
| 8. J. L. LECONTE,* 1854, in the
absence of A. L. ELWYN.* | 1905. |

Commonwealth of Massachusetts.

In the Year One Thousand Eight Hundred and Seventy-Four.

AN ACT

TO INCORPORATE THE "AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE."

Be it enacted by the Senate and House of Representatives, in General Court assembled, and by the authority of the same, as follows:

SECTION 1. Joseph Henry of Washington, Benjamin Pierce of Cambridge, James D. Dana of New Haven, James Hall of Albany, Alexis Caswell of Providence, Stephen Alexander of Princeton, Isaac Lea of Philadelphia, F. A. P. Barnard of New York, John S. Newberry of Cleveland, B. A. Gould of Cambridge, T. Sterry Hunt of Boston, Asa Gray of Cambridge, J. Lawrence Smith of Louisville, Joseph Lovering of Cambridge, and John LeConte of Philadelphia, their associates, the officers and members of the Association, known as the "American Association for the Advancement of Science," and their successors, are hereby made a corporation by the name of the "American Association for the Advancement of Science," for the purpose of receiving, purchasing, holding, and conveying real and personal property, which it now is, or hereafter may be, possessed of, with all the powers and privileges, and subject to the restrictions, duties and liabilities set forth in the general laws which now or hereafter may be in force and applicable to such corporations.

SECTION 2. Said corporation may have and hold by purchase, grant, gift, or otherwise, real estate not exceeding one hundred thousand dollars in value, and personal estate of the value of two hundred and fifty thousand dollars.

SECTION 3. Any two of the corporators above named are hereby authorized to call the first meeting of the said corporation in the month of August next ensuing, by notice thereof "by mail," to each member of the said Association.

SECTION 4. This act shall take effect upon its passage.

HOUSE OF REPRESENTATIVES, March 10, 1874.

Passed to be enacted,

JOHN E. SANFORD, *Speaker*.

IN SENATE, March 17, 1874.

Passed to be enacted,

GEO. B. LORING, *President*.

March 19, 1874.

Approved.

W. B. WASHBURN.

SECRETARY'S DEPARTMENT,

Boston, April 3, 1874.

A true copy, Attest:

DAVID PULSIFER,

Deputy Secretary of the Commonwealth.

CONSTITUTION

OF THE

AMERICAN ASSOCIATION FOR THE ADVANCE- MENT OF SCIENCE.

Incorporated by Act of the General Court of the Commonwealth of Massachusetts.

OBJECTS.

ARTICLE 1. The objects of the Association are, by periodical and migratory meetings, to promote intercourse between those who are cultivating science in different parts of America, to give a stronger and more general impulse and more systematic direction to scientific research, and to procure for the labors of scientific men increased facilities and a wider usefulness.

MEMBERSHIP.

ART. 2. The Association shall consist of members, fellows, patrons, corresponding members and honorary fellows.

MEMBERS.

ART. 3. Any person may become a member of the Association upon recommendation in writing by two members or fellows, and election by the Council. Any incorporated scientific society or institution, or any public or incorporated library, may be enrolled as a member of the Association by vote of the Council by payment of the initiation fee; such society, institution, or library may be represented by either the President, Curator, Director, or Librarian presenting proper credentials at any meeting of the Association for which the assessment has been paid.

ASSOCIATES.

Associates for any single meeting shall be admitted on the payment of three dollars, such associates to have all the privileges of the meeting, except reading papers and voting.

Members of scientific societies whose meetings are contemporaneous with, or immediately subsequent to, that of the Associa-

CONSTITUTION.

tion, and which are recognized by vote of the Council as "Affiliated Societies," may become associate members for that meeting on the payment of three dollars. They shall be entitled to all the privileges of membership except voting or appointment to office, but their names shall not appear in the list of members printed in the annual report.

FOREIGN ASSOCIATES.

Any member or fellow of any national scientific or educational institution, or of any society or academy of science, of any country not in America, who may be present at any meeting of the Association shall, on presenting the proper credentials, be enrolled without fee as a Foreign Associate, and shall be entitled to all the privileges of the meeting except voting on matters of business.

FELLOWS.

ART. 4. Fellows shall be elected by the Council from such of the members as are professionally engaged in science, or have, by their labors, aided in advancing science. The election of fellows shall be by ballot, and a majority vote of the members of the Council at a designated meeting of the Council.

PATRONS.

ART. 5. Any person paying to the Association the sum of one thousand dollars shall be classed as a patron, and shall be entitled to all the privileges of a member and to all its publications.

HONORARY FELLOWS AND CORRESPONDING MEMBERS.

ART. 6. Honorary fellows of the Association, not exceeding three for each Section, may be elected, the nominations to be made by the Council and approved by ballot in the respective sections before election by ballot in General Session. Honorary fellows shall be entitled to all the privileges of fellows, and shall be exempt from all fees and assessments, and entitled to all publications of the Association issued after the date of their election. Corresponding members shall consist of such scientists not residing in America as may be elected by the Council, and their number shall be limited to fifty. Corresponding members shall be entitled to

CONSTITUTION.

all the privileges of members and to the annual volumes of Proceedings published subsequent to their election.

SUSPENSIONS.

ART. 7. The name of any member or fellow two years in arrears for annual dues shall be erased from the list of the Association, provided, that two notices of indebtedness, at an interval of at least three months, shall have been given; and no such person shall be restored until he has paid his arrearages or has been re-elected. The Council shall have power to exclude from the Association any member or fellow, on satisfactory evidence that said member or fellow is an improper person to be connected with the Association, or has in the estimation of the Council made improper use of his membership or fellowship.

OFFICERS.

ART. 8. No member or fellow shall take part in the organization of, or hold office in, more than one section at any one meeting.

ART. 9. The officers of the Association shall be elected by ballot by the General Committee from the fellows, and shall consist of a President, a Vice-President from each section, a Permanent Secretary, a General Secretary, a Secretary of the Council, a Treasurer, and a Secretary of each Section; these, with the exception of the Permanent Secretary, the Treasurer, and the Secretaries of the Sections, shall be elected at each meeting for the following one, and, with the exception of the Treasurer and the Permanent Secretary, shall not be re-eligible for the next two meetings. The term of office of the Permanent Secretary, of the Treasurer, and of the Secretaries of the Sections, shall be five years.

PRESIDENT.

ART. 10. The President, or, in his absence, the senior Vice-President present, shall preside at all General Sessions of the Association and at all meetings of the Council. It shall also be the duty of the President to give an address at a General Session of the Association at the meeting following that over which he presided.

VICE-PRESIDENTS.

ART. 11. The Vice-Presidents shall be chairmen of their respective Sections, and of their Sectional Committees, and it

CONSTITUTION.

shall be part of their duty to give an address, each before his own Section, at such time as the Council shall determine at the meeting subsequent to that at which he presides. The Vice-Presidents may appoint temporary chairmen to preside over the sessions of their sections, but shall not delegate their other duties. The Vice-Presidents shall have seniority in order of their continuous membership in the Association.

GENERAL SECRETARY.

ART. 12. The General Secretary shall be the Secretary of all General Sessions of the Association, and shall keep a record of the business of these sessions. He shall receive the records from the Secretaries of the Sections, which, after examination, he shall transmit with his own records to the Permanent Secretary within two weeks after the adjournment of the meeting.

SECRETARY OF THE COUNCIL.

ART. 13. The Secretary of the Council shall keep the records of the Council. He shall give to the Secretary of each Section the titles of papers assigned to it by the Council. He shall receive proposals for membership and bring them before the Council.

PERMANENT SECRETARY.

ART. 14. The Permanent Secretary shall be the executive officer of the Association under the direction of the Council. He shall attend to all business not specially referred to committees nor otherwise constitutionally provided for. He shall keep an account of all business that he has transacted for the Association, and make annually a general report for publication in the annual volume of Proceedings. He shall attend to the printing and distribution of the annual volume of Proceedings, and all other printing ordered by the Association. He shall issue a circular of information to members and fellows at least three months before each meeting, and shall, in connection with the Local Committee, make all necessary arrangements for the meetings of the Association. He shall provide the Secretaries of the Association with such books and stationery as may be required for their records and business, and shall provide members and fellows with such blank forms as may be required for facilitating the business of the Association. He shall collect all assessments

CONSTITUTION.

and admission fees, and notify members and fellows of their election, and of any arrearages. He shall receive, and bring before the Council, the titles and abstracts of papers proposed to be read before the Association. He shall keep an account of all receipts and expenditures of the Association, and report the same annually at the first meeting of the Council, and shall pay over to the Treasurer such unexpended funds as the Council may direct. He shall receive and hold in trust for the Association all books, pamphlets, and manuscripts belonging to the Association, and allow the use of the same under the provisions of the Constitution and the orders of the Council. He shall receive all communications addressed to the Association during the intervals between meetings, and properly attend to the same. He shall at each meeting report the names of fellows and members who have died since the preceding meeting. He shall be allowed a salary which shall be determined by the Council, and may employ one or more clerks at such compensation as may be agreed upon by the Council.

TREASURER.

ART. 15. The Treasurer shall invest the funds received by him in such securities as may be directed by the Council. He shall annually present to the Council an account of the funds in his charge. No expenditure of the principal in the hands of the Treasurer shall be made without a unanimous vote of the Council, and no expenditure of the income received by the Treasurer shall be made without a two-thirds vote of the Council. The Treasurer shall give bonds for the faithful performance of his duty in such manner and sum as the Council shall from time to time direct.

SECRETARIES OF THE SECTIONS.

ART. 16. The Secretaries of the Sections shall keep the records of their respective Sections, and, at the close of the meeting, give the same, including the records of subsections, to the General Secretary. They shall also be the Secretaries of the sectional committees. The Secretaries shall have seniority in order of their continuous membership in the Association.

VACANCIES.

ART. 17. In case of a vacancy in the office of President, the senior Vice-President shall preside, as provided in Article 10,

CONSTITUTION.

until the General Committee can be assembled and the vacancy filled by election. Vacancies in the offices of Vice-President, Permanent Secretary, Secretary of the Council, Secretaries of the Sections, and Treasurer, shall be filled by the Council by ballot.

COUNCIL.

ART. 18. The Council shall consist of the Past Presidents, and the Vice-Presidents of the last two meetings, together with the President, the Vice-Presidents, the Permanent Secretary, the General Secretary, the Secretary of the Council, the Secretaries of the Sections, and the Treasurer of the current meeting, of one fellow elected from each Section by ballot on the first day of its meeting, of one fellow elected by each affiliated society, and one additional fellow from each affiliated society having more than twenty-five members who are fellows of the Association, and of nine fellows elected by the Council, three being annually elected for a term of three years. The members present at any regularly called meeting of the Council, provided there are at least five, shall form a quorum for the transaction of business. The Council shall meet on the day preceding each annual meeting of the Association, and arrange the program for the first day of the sessions. The time and place of this first meeting shall be designated by the Permanent Secretary. Unless otherwise agreed upon, regular meetings of the Council shall be held in the Council room at 9 o'clock A. M., on each day of the meeting of the Association. Special meetings of the Council may be called at any time by the President. The Council shall be the board of supervision of the Association, and no business shall be transacted by the Association that has not first been referred to, or originated with, the Council. The Council shall decide which papers, discussions, and other proceedings shall be published, and have the general direction of the publications of the Association; manage the financial affairs of the Association; arrange the business and programs for General Sessions; suggest subjects for discussion, investigation or reports; elect members and fellows; and receive and act upon all invitations extended to the Association and report the same at a General Session of the Association. The Council shall receive all reports of Special Committees and decide upon them, and only such shall be read in General

CONSTITUTION.

Session as the Council shall direct. The Council shall appoint at each meeting the following subcommittees who shall act, subject to appeal to the whole Council, until their successors are appointed at the following meeting: 1, on Papers and Reports; 2, on Members; 3, on Fellows.

GENERAL COMMITTEE.

ART. 19. The General Committee shall consist of the Council and one member or fellow elected by each of the Sections, who shall serve until their successors are elected. It shall be the duty of the committee to meet at the call of the President and elect the general officers for the following meeting of the Association. It shall also be the duty of this committee to fix the time and place for the next meeting. The Vice-President and Secretary of each Section shall be recommended to the General Committee by the Sectional Committee.

MEETINGS.

ART. 20. The Association shall hold a public meeting annually, for one week or longer, at such time and place as may be determined by vote of the General Committee, and the preliminary arrangements for each meeting shall be made by the Local Committee, in conjunction with the Permanent Secretary and such other persons as the Council may designate.

But if suitable preliminary arrangements cannot be made, the Council may afterward change the time and place appointed by the General Committee, if such change is believed advisable, by two-thirds of the members present.

ART. 21. A General Session shall be held at 10 o'clock, A. M., on the first day of the meeting, and at such other times as the Council may direct.

SECTIONS AND SUBSECTIONS.

ART. 22. The Association shall be divided into Sections, namely:—A, *Mathematics and Astronomy*; B, *Physics*; C, *Chemistry, including its application to Agriculture and the Arts*; D, *Mechanical Science and Engineering*; E, *Geology and Geography*; F, *Zoology*; G, *Botany*; H, *Anthropology*; I, *Social and Economic Science*; K, *Physiology and Experimental Medicine*. The Council shall have

CONSTITUTION.

power to consolidate any two or more Sections temporarily, and such consolidated Sections shall be presided over by the senior Vice-President and Secretary of the Sections comprising it.

SECTIONAL COMMITTEES.

ART. 23. Immediately on the organization of a Section there shall be a member or fellow elected by ballot after open nomination, who, with the Vice-President and Secretary and the Vice-President and Secretary of the preceding meeting, and the members or fellows elected by ballot at the four preceding meetings, shall form its Sectional Committee. The Sectional Committees shall have power to fill vacancies in their own numbers. Meetings of the Sections shall not be held at the same time with a General Session. The Sectional Committee may invite distinguished foreign associates present at any meeting to serve as honorary members of said Committee.

ART. 24. The Sectional Committee of any Section may at its pleasure form one or more temporary Subsections, and may designate the officers thereof. The Secretary of a Subsection shall, at the close of the meeting, transmit his records to the Secretary of the Section.

ART. 25. No paper shall be read in any Section or Subsection until it has been placed on the program of the day by the Sectional Committee.

ART. 26. The Sectional Committees shall arrange and direct the business of their respective Sections. They shall prepare the daily programs and give them to the Permanent Secretary for printing at the earliest moment practicable. No titles of papers shall be entered on the daily programs except such as have passed the Committee. No change shall be made in the program for the day in a Section without the consent of the Sectional Committee. The Sectional Committees may refuse to place the title of any paper on the program; but every such title, with the abstract of the paper or the paper itself, must be referred to the Council with the reasons why it was refused. The Sectional Committee shall also make nominations to the General Committee for Vice-President and Secretary of their respective Sections as provided for in Article 19.

ART. 27. The Sectional Committees shall examine all papers and abstracts referred to the Sections, and they shall not place

CONSTITUTION.

on the program any paper inconsistent with the character of the Association; and to this end they have power to call for any paper, the character of which may not be sufficiently understood from the abstract submitted.

PAPERS AND COMMUNICATIONS.

ART. 28. All members and fellows must forward to the Secretary of the proper Section or to the Permanent Secretary, as early as possible, and when practicable before the convening of the Association, full titles of all the papers which they propose to present during the meeting, with a statement of the time that each will occupy in delivery, and also such abstracts of their contents as will give a general idea of their nature; and no title shall be considered by a Sectional Committee until an abstract of the paper or the paper itself has been received.

ART. 29. If the author of any paper be not ready when called upon, in the regular order of the official program, the title may be dropped to the bottom of the list.

ART. 30. Whenever practicable the proceedings and discussions at General Sessions, Sections and Subsections, shall be reported by professional reporters, but such reports shall not appear in print as the official reports of the Association unless revised by the Secretaries.

PRINTED PROCEEDINGS.

ART. 31. The Permanent Secretary shall have the Proceedings of each meeting printed in an octavo volume as soon after the meeting as possible, beginning one month after adjournment. Authors must prepare their papers or abstracts ready for the press, and these must be in the hands of the Secretaries of the Sections before the final adjournment of the meeting, otherwise only the titles will appear in the printed volume. The Council shall have power to order the printing of any paper by abstract or title only. Whenever practicable, proofs shall be forwarded to authors for revision. If any additions or substantial alterations are made by the author of a paper after its submission to the Secretary, the same shall be distinctly indicated. Illustrations must be provided for by the authors of the papers, or by a special appropriation from the Council. Immediately on publication of

CONSTITUTION.

the volume, a copy shall be forwarded to every member and fellow of the Association who shall have paid the assessment for the meeting to which it relates, and it shall also be offered for sale by the Permanent Secretary at such price as may be determined by the Council. The Council shall also designate the institutions to which copies shall be distributed.

LOCAL COMMITTEE.

ART. 32. The Local Committee shall consist of persons interested in the objects of the Association and residing at or near the place of the proposed meeting. It is expected that the Local Committee, assisted by the officers of the Association, will make all essential arrangements for the meeting, and issue a circular giving necessary particulars, at least one month before the meeting.

LIBRARY OF THE ASSOCIATION.

ART. 33. All books and pamphlets received by the Association shall be in charge of the Permanent Secretary, who shall have a list of the same printed and shall furnish a copy to any member or fellow on application. Members and fellows who have paid their assessments in full shall be allowed to call for books and pamphlets, which shall be delivered to them at their expense on their giving a receipt agreeing to make good any loss or damage, and to return the same free of expense to the Secretary at the time specified in the receipt given. All books and pamphlets in circulation must be returned at each meeting. Not more than five books, including volumes, parts of volumes, and pamphlets, shall be held at one time by any member or fellow. Any book may be withheld from circulation by order of the Council. [The Library of the Association was, by vote of the Council in 1895, placed on deposit in the Library of the University of Cincinnati, Ohio. Members can obtain the use of books by writing to the Librarian of the University Library, Cincinnati, Ohio.]

ADMISSION FEE AND ASSESSMENTS.

ART. 34. The admission fee for members shall be five dollars in addition to the annual assessment. On the election of any member as a fellow an additional fee of two dollars shall be paid.

CONSTITUTION.

ART. 35. The annual assessment for members and fellows shall be three dollars.

ART. 36. Any member or fellow who shall pay the sum of fifty dollars to the Association, at any one time, shall become a Life Member, and as such shall be exempt from all further assessments, and shall be entitled to the Proceedings of the Association. All money thus received shall be invested as a permanent fund, the income of which, during the life of the member, shall form a part of the general fund of the Association; but, after his death, shall be used only to assist in original research, unless otherwise directed by unanimous vote of the Council.

ART. 37. All fees and assessments must be paid to the Permanent Secretary, who shall give proper receipts for the same.

ACCOUNTS.

ART. 38. The accounts of the Permanent Secretary and of the Treasurer shall be audited annually by Auditors appointed by the Council.

ALTERATIONS OF THE CONSTITUTION.

ART. 39. No part of this Constitution shall be amended or annulled, without the concurrence of three-fourths of the members and fellows present in General Session, after notice given at a General Session of a preceding meeting of the Association.

MEMBERS AND FELLOWS
OF THE
AMERICAN ASSOCIATION
FOR THE
ADVANCEMENT OF SCIENCE.

(CORRECTED TO DECEMBER 1, 1903.)

SURVIVING FOUNDERS.

[At the Brooklyn Meeting, 1894, a resolution was unanimously adopted by which all the surviving founders of the Association who have maintained an interest in science were made Honorary Life Members of the Association in recognition of their pioneer work in American Science.]

ABBOT, SAMUEL L., Boston, Mass.

BOYÉ, MARTIN H., Coopersburg, Pa.

GIBBS, WOLCOTT, Newport, R. I.

PATRONS.

[Persons contributing one thousand dollars or more to the Association are classed as Patrons, and are entitled to the privileges of members and to the publications. The names of Patrons are to remain permanently on the list.]

THOMPSON, MRS. ELIZABETH, Stamford, Conn. (22). (Died July, 1899.)

LILLY, GEN. WILLIAM, Mauch Chunk, Pa. (28). (Died Dec. 1, 1893.)

HERRMAN, MRS. ESTHER, 59 West 56th St., New York, N. Y. (29).

McMILLIN, EMERSON, 40 Wall St., New York, N. Y. (37).

HONORARY FELLOWS.

[See ARTICLE VI of the Constitution.]

*ROGERS, PROF. WILLIAM B., Boston, Mass. (1). 1881. (Born Dec. 7, 1804. Died May 30, 1882.) **B E**

*CHEVREUL, MICHEL EUGENE, Paris, France. (35). 1886. (Born Aug. 31, 1786. Died April 9, 1889.) **C**

*GENTH, DR. F. A., Philadelphia, Pa. (24). 1888. (Born May 17, 1820. Died Feb. 2, 1892.) **C E**

MEMBERS AND FELLOWS.

- *HALL, PROF. JAMES, Albany, N. Y. (1). 1890. (Born in 1811. Died Aug. 7, 1898.)
- *GOULD, DR. BENJAMIN APTHORP, Cambridge, Mass. (2). 1895. (Born Sept. 27, 1824. Died Nov. 26, 1896.) **A B**
- *LEUCKART, PROF. RUDOLF. (44). 1895. (Born in Helmstedt, Braunschweig, Germany, Oct. 7, 1823. Died in Leipzig, Feb. 7, 1898.) **F**
- *GIBBS, PROF. WOLCOTT, Newport, R. I. (1). 1896. **B C**
- *WARINGTON, ROBERT, F. R. S., Rothamsted, Harpenden, England. (40). 1899. **C**
- *WESTINGHOUSE, GEORGE, Pittsburg, Pa. (50). 1902. **D**

MEMBERS AND FELLOWS.

The names designated by an asterisk (*) are those of Fellows. (See ARTICLE IV of the Constitution.) The number in parenthesis indicates the meeting at which the Member joined the Association; the date following is the year when made a Fellow; the black letters at end of line are those of the Sections to which the Member or Fellow belongs. When the name is given in small capitals, it designates that the Member or Fellow is also a Life Member. Any Member or Fellow may become a Life Member by the payment of fifty dollars. The income of the money derived from a life membership is used for the general purposes of the Association during the life of the Member; afterwards it is to be used to aid in original research. Life Members are exempt from the annual assessment, and are entitled to the publications. The names of Life Members are printed in small capitals in the regular list of Members and Fellows.

The Constitution requires that the names of all Members two years in arrears shall be omitted from the list, but their names will be restored on payment of arrearages. Members not in arrears are entitled to the publications of the Association, including the journal *Science*.

- *Abbe, Cleveland, Professor of Meteorology, Weather Bureau, U. S. Dept. Agriculture, Washington, D. C. (16). 1874. **A B**
- *Abbe, Cleveland, Jr., 2017 I St., N. W., Washington, D. C. (44). 1899. **E**
- Abbe, Truman, M. D., 2017 I St., N. W., Washington, D. C. (52).
- K**
- *Abbe, Dr. Robert, 13 W. 50th St., New York, N. Y. (36). 1892.
- *Abbot, Charles G., Smithsonian Institution, Washington, D. C. (49). 1902. **B**
- Abbot, Francis Ellingwood, Ph.D., 43 Larch Road, Cambridge, Mass. (50). **I**
- *ABBOT, DR. SAMUEL L., 90 Mt. Vernon St., Boston, Mass. (1). 1898.
- Abbott, Alexander C., Univ. of Penna., Philadelphia, Pa. (52).
- K**
- Abbott, Frank L., Professor of Physical Science, State Normal School, Greeley, Colo. (50). **B E**
- Abbott, Theodore Sperry, C. E., Saltillo, Coahuila, Mexico. (52).
- D**
- *Abel, John J., Professor of Pharmacology, Johns Hopkins University, Baltimore, Md. (51). 1902. **C**

MEMBERS AND FELLOWS.

- Abraham, Abraham, Brooklyn, N. Y. (43).
 Acheson, Edward Goodrich, President of the International Acheson Graphite Co., Niagara Falls, N. Y. (50). **C**
 *Adams, Charles C., University of Michigan, Ann Arbor, Mich. (50). 1903. **F**
 Adams, Comfort A., 13 Farrar St., Cambridge, Mass. (47).
 Adams, C. E., M. D., 29 West Broadway, Bangor, Me. (43). **F**
 Adams, Edward Dean, 35 Wall St., New York, N. Y. (49).
 Adams, Ernest Kempton, 455 Madison Ave., New York, N. Y. (50). **D E**
 Adams, Frederick C., Classical High School, Providence, R. I. (50). **B C**
 *Adler, Isaac, M. D., 12 E 60th St., New York, N. Y. (49). 1903. **K**
 *Adriance, John S., 105 E. 39th St., New York, N. Y. (39). 1895. **C**
 Ailes, Hon. Milton E., Riggs National Bank, Washington, D. C. (52). **I**
 Ainsworth, Herman Reeve, M. D., Addison, N. Y. (51). **I K**
 Akeley, Lewis E., Professor of Physics and Chemistry, University of South Dakota, Vermillion, S. Dak. (51). **B C**
 Albaugh, Maurice, Secretary of the Crescent Metallic Fence Stay Co., Covington, Ohio. (51). **D**
 Albert, Harry Lee, Professor of Biology, State Normal School, Cape Girardeau, Mo. (53). **F G**
 Albrecht, Emil Poole, Secretary of The Bourse, 1523 N. 17th St., Philadelphia, Pa. (51). **A D**
 Albrecht, Sebastian, 767 Forest Home, Milwaukee, Wis. (52). **A**
 Albree, Chester B., Mechanical Engineer, 14-30 Market St., Allegheny, Pa. (50). **D**
 *Alden, John, Pacific Mills, Lawrence, Mass. (36). 1898.
 Alderson, Victor C., President Colorado School of Mines, Golden, Colorado. (50). **D**
 *Aldrich, Wm. S., Director, Thomas S. Clarkson Memorial School of Technology, Potsdam, N. Y. (43). 1897. **D**
 Alexander, Chas. Anderson, M. E., Johnston Harvester Co., 10 Vine St., Batavia, N. Y. (50). **D**
 Alexander, Curtis, Mining Engineer, Cedral, San Luis Potosi, Mexico. (50). **E**
 Alexander, George E., Chemist and Mining Engineer, 1736 Champa St., Denver, Colo. (50). **C D**
 Alexander, Harry, E. E., M. E., 18 and 20 W. 34th St., New York, N. Y. (50). **D**
 Aley, Robert J., Indiana Univ., Bloomington, Ind. (49).
 Allabach, Miss Lulu F., Instructor in Biology and Zoology Central State Normal School, Lock Haven, Pa. (52). **F**
 Allan, Chas. F., Newburgh, N. Y. (50). **B E**
 Allderdice, Wm. H., Lieutenant U. S. Navy, Navy Dept., Washington, D. C. (33). **D**

MEMBERS AND FELLOWS.

- Alleman, Gellert, Ph. D., Swarthmore College, Swarthmore, Pa. (50). **C**
- Allen, C. L., Floral Park, N. Y. (49).
- Allen, Charles Metcalf, Assistant Prof. of Experimental Engineering, Worcester Polytechnic Institute, Worcester, Mass. (52). **D**
- Allen, Edwin West, Editor of *Experiment Station Record*, U. S. Dept. Agriculture, Washington, D. C. (52). **I**
- *Allen, Frank, Ph. D., Cornell University, Ithaca, N. Y. (49). 1903. **B**
- Allen, Hon. F. I., Commissioner of Patents, Washington, D. C. (52). **I**
- Allen, Glover Morrill, Secretary Boston Soc. Nat. Hist., Perkins Hall 68, Cambridge, Mass. (52). **F**
- Allen, H. Jerome, M. D., 421 H St., N.E., Washington, D. C. (51). **K**
- Allen, Miss Jessie Blount, Univ. of Chicago, Chicago, Ill. (52). **F**
- Allen, J. M., President of the Hartford Steam Boiler Inspection and Insurance Co., Hartford, Conn. (22). **D**
- Allen, John Robins, Asst. Prof. of Mechanical Engineering, University of Michigan, Ann Arbor, Mich. (45). **B D**
- Allen, Richard H., Chatham, N. J. (49).
- Allen, Walter S., 34 S. Sixth St., New Bedford, Mass. (39). **C I**
- Allis, Edward Phelps, Jr., Palais Carnolès, Menton, France. (52). **F**
- Allison, Charles Edward, M. D., Elysburg, Pa. (51). **K**
- Allison, Hendery, M. D., 260 West 57th St., New York, N. Y. (50). **K**
- Allyn, G. W., M. D., Secretary Academy of Science and Art, 515 Penn Ave., Pittsburg, Pa. (51). **F**
- Almond, Thomas R., M. E., 83-85 Washington St., Brooklyn, N. Y. (51). **D**
- *Almy, John E., Ph. D., Instructor in Physics, University of Nebraska, Lincoln, Neb. (50). 1901. **B**
- Alpers, Wm. C., 45 West 31st St., New York, N. Y. (50). **I**
- Alsop, E. B., 1502 20th St., N. W., Washington, D. C. (50). **D**
- Alspach, E. F., 455 West Sixth Ave., Columbus, O. (48). **H**
- *Alvord, Maj. Henry E., U. S. Dept. Agriculture, Washington, D. C. (29). 1882. **I**
- *Alwood, Prof. Wm. B., Virginia Polytechnic Institute, Blacksburg, Va. (39). 1891. **F**
- Ames, Oakes, Assistant Director of the Botanic Garden of Harvard University, North Easton, Mass. (50). **G**
- Ammons, Miss Theodosia G., Professor of Domestic Science, State Agricultural College, Fort Collins, Colo. (50). **I**
- Amundson, John A., 146 Broadway, New York, N. Y. (49).

MEMBERS AND FELLOWS.

- Amweg, Frederick James, Civil and Consulting Engineer, Box 537, Honolulu, H. T. (51). **D**
- Anders, Howard S., M. D., 1836 Wallace St., Philadelphia, Pa. (51). **K**
- Anderson, A. J. C., 127 Water St., New York, N. Y. (49).
- *Anderson, Alexander P., American Cereal Co., Monadnock Building, Chicago, Ill. (45). 1899. **G**
- Anderson, Prof. Douglas S., Tulane Univ., New Orleans, La. (49). **B D**
- Anderson, Edwin Clinton, M. D., 726 Market St., Chattanooga, Tenn. (51). **K**
- Anderson, Frank, E. M., 255 Second East St., Salt Lake City, Utah. (50). **D E**
- Anderson, Frank P., Epworth, Iowa. (46).
- Anderson, J. Hartley, M. D., 4630 Fifth Ave., Pittsburg, Pa. (50). **K**
- Anderson, James Thomas, Lieutenant U. S. Army, 1112 N. Cascade Ave., Colorado Springs, Colo. (51).
- Anderson, William G., M. D., Associate Director Yale Gymnasium, New Haven, Conn. (52). **H K**
- Anderson, Winslow, M. D., President of College of Physicians and Surgeons of San Francisco, 1025 Sutter St., San Francisco, Cal. (51). **K**
- Andrews, Frank Marion, Ph. D., Instructor in Botany, Indiana University, Bloomington, Ind. (52). **G**
- Andrews, Wm. Edward, Principal Township High School, 700 South Clay St., Taylorville, Ill. (52). **D**
- Andrews, William Symes, care Gen'l Elec. Co., Schenectady, N. Y. (50). **D E**
- Annear, John Brothers, 1028 Regent St., Boulder, Colo. (50). **C**
- Anthony, Mrs. Emilia C., Gouverneur, N. Y. (47). **G**
- Anthony, Richard A., 122-124 Fifth Ave., New York, N. Y. (49).
- *Anthony, Prof. Wm. A., Cooper Union, New York, N. Y. (28). 1880. **B**
- Apple, Joseph H., President of the Woman's College, Frederick, Md. (52). **I**
- *Appleton, John Howard, Professor of Chemistry, Brown University, Providence, R. I. (50). 1901. **C**
- Archer, George Frost, 31 Burling Slip, New York, N. Y. (50). **D**
- Armitage, Thomas L., M. D., Princeton, Minnesota. (51). **K**
- Armsby, Henry Prentiss, Director Agrl. Expr. Station, State College, Centre Co., Pa. (52). **C**
- Armstrong, Robert, M. D., Boulder, Colo. (50). **H K**
- Arnold, Bion Joseph, 4128 Prairie Ave., Chicago, Ill. (50). **D**
- Arnold, Delos, Pasadena, Cal. (51).

MEMBERS AND FELLOWS.

- Arnold, Ernst Hermann, M. D., Director New Haven Normal School of Gymnastics, 46 York Square, New Haven, Conn. (52). **K**
- Arnold, Mrs. Francis B., 101 W. 78th St., New York, N. Y. (49).
- Arnold, Jacob H., Teacher of Natural Science, Redfield College, Redfield, South Dakota. (50). **I**
- Arnold, Ralph, U. S. Geological Survey, Washington, D. C. (51). **E**
- *Arthur, J. C., Lafayette, Ind. (21). 1883. **G**
- Asdale, William James, M. D., Professor of Gynecology, Western Penna. Medical College, Pittsburg, Pa. (51). **K**
- Ashbrook, Donald Sinclair, 3614 Baring St., Philadelphia, Pa. (51). **C**
- Ashcraft, A. M., Ph.D., P. O. Box 742, Baltimore, Md. (52).
- Ashe, W. Willard, Consulting Forester, Raleigh, N. C. (47).
- *Ashley, George Hall, Professor of Biology and Geology, College of Charleston, Charleston, S. C. (51). 1903. **E F**
- *Ashmead, Wm. H., Department of Insects, U. S. National Museum, Washington, D. C. (40). 1892. **F**
- Ashton, Charles Hamilton, Assistant in Mathematics, University of Kansas, Lawrence, Kansas. (53). **A**
- Aspinwall, John, 290 Broadway, New York, N. Y. (49).
- Atkins, Prof. Martin D., Professor of Physics and Electrical Engineering, Agricultural College, Mich. (48). **B**
- *Atkinson, Edward, 31 Milk St., Boston, Mass. (29). 1881. **D I**
- *Atkinson, George F., Cornell University, Ithaca, N. Y. (39). 1892. **G**
- Atkinson, John B., Earlington, Ky. (26). **D**
- *Atwater, W. O., Professor of Chemistry, Wesleyan Univ., Middletown, Conn. (29). 1882. **C**
- *Atwell, Charles B., Northwestern Univ., Evanston, Ill. (36). 1890. **G**
- *Auchincloss, Wm. S., 36 W. 12th St., New York, N. Y. (29). 1886. **A D**
- *Austin, Prof. Peter T., 80 Broad St., New York, N. Y. (44). 1896. **C**
- Austin, Oscar P., Chief Bureau of Statistics, Washington, D. C. (51). **I**
- *Avery, Elroy M., Ph. D., LL.D., 657 Woodland Hills Ave., Cleveland, Ohio. (37). 1889. **B**
- EVERY, SAMUEL P., 4 E. 38th St., New York, N. Y. (36).
- Avis, Edward S., Ph. D., President North Georgia Agricultural College, Dahlonega, Ga. (52).
- Ayer, Edward Everett, 915 Old Colony Bldg., Chicago, Ill. (37). **H**
- Ayer, James I., 5 Main St. Park, Malden, Mass. (50). **D**
- *Ayers, Howard, President Univ. of Cincinnati, Cincinnati, Ohio. (49). 1901. **F**

MEMBERS AND FELLOWS.

- Aylesworth, Barton O., President of the State Agricultural College, Fort Collins, Colo. (50). **I**
- *Ayres, Prof. Brown, Tulane University, New Orleans, La. (31). 1885. **B**
- Ayres, Horace B., U. S. Geological Survey, Washington, D. C. (40).
- Babcock, Charles A., Supt. Schools, Oil City, Pa. (52). **F**
- Babcock, Stephen E., Chief Engineer, Mohawk River Improvement, 54-56 Mann Bldg., Utica, N. Y. (51). **D**
- *Babcock, Prof. S. Moulton, 432 Lake St., Madison, Wis. (33). 1885. **C**
- Baerecke, John F., M. D., Professor of Biology, Stetson University, DeLand, Fla. (50). **F K**
- Bagby, J. H. C., Dept. Physical Science, Hampden-Sidney College, Hampden-Sidney, Va. (50). **B**
- *Bagg, Rufus Mather, Jr., Ph. D., High School, Brockton, Mass. (49). 1903. **E**
- BAGGLEY, RALPH, Pittsburg, Pa. (50). **D**
- *Bailey, E. H. S., Professor of Chemistry, Univ. of Kansas, Lawrence, Kan. (25). 1889. **C E**
- Bailey, E. P., In charge Department of Science, Wakefield High School, 102 Railroad St., Wakefield, Mass. (52). **F**
- Bailey, Frank H., Lieut. Com'dr, U. S. N., Bureau of Steam Engineering, Navy Dept., Washington, D. C. (52). **D**
- *Bailey, Solon Irving, Associate Prof. Astronomy, Harvard Observatory, Cambridge, Mass. (50). 1901. **A**
- Bailey, Vernon, Department of Agriculture, Washington, D. C. (52). **F**
- *Bain, Samuel M., Professor of Botany, University of Tennessee, Knoxville, Tenn. (50). 1902. **G**
- Bair, Joseph Hershey, Ph. D., Columbia University, New York, N. Y. (52). **H K**
- Baird, Robert Logan, Oberlin College, Oberlin, Ohio. (53). **F**
- Baker, A. G., Springfield, Mass. (44).
- *Baker, Frank, M. D., 1728 Columbia Road, Washington, D. C. (31). 1886. **F H K**
- Baker, Frederic, 815 Fifth Ave., New York, N. Y. (49).
- Baker, Hugh P., Yale Forest School, New Haven, Conn. (51). **G**
- *Baker, James H., President of the University of Colorado, Boulder, Colo. (50). 1903. **I**
- *Baker, Marcus, U. S. Geol. Survey, Washington, D. C. (30). 1882. **A**
- Baker, Theodore, Box 44, Haskell, N. J. (51). **A**
- Balch, Alfred William, Assistant Surgeon, U. S. N., Navy Department, Washington, D. C. (52). **C K**

MEMBERS AND FELLOWS.

- *BALCH, EDWIN SWIFT, 1412 Spruce St., Philadelphia, Pa. (51).
1903. **E H**
Balch, Francis Noyes, Prince St., Jamaica Plain, Mass. (50). **F**
Balch, Samuel W., 67 Wall St., New York, N. Y. (43).
Baldwin, Mrs. G. H., 3 Madison Ave., Detroit, Mich. (34). **H**
Baldwin, Herbert B., 9-11 Franklin St., Newark, N. J. (43).
- *Baldwin, Prof. J. Mark, Princeton, N. J. (46). 1898. **H**
- *BALDWIN, HON. SIMEON E., Associate Judge of Supreme Court
of Errors, New Haven, Conn. (50). 1901. **I**
- *BALDWIN, S. PRENTISS, 736 Prospect St., Cleveland, Ohio. (47).
1900. **E**
Baldwin, William Dickson, 25 Grant Place, Washington, D. C.
(52). **E**
- *Ball, Carleton R., U. S. Dept. Agriculture, Washington, D. C.
(49). 1902. **G**
- *Ball, Elmer Darwin, Professor of Animal Biology, State Agricul-
tural College, Logan, Utah. (50). 1903. **F**
Ball, Miss Helen Augusta, 43 Laurel St., Worcester, Mass.
(50). **F**
Ballard, C. A., Curator of Museum, State Normal School, Moor-
head, Minn. (51).
- *Ballard, Harlan H., 50 South St., Pittsfield, Mass. (31). 1891.
E F
Balliet, Thomas M., Supt. of Schools, Springfield, Mass. (48). **H I**
Bancroft, Alonzo C., Elma, New York. (41).
Bancroft, Frank Watts, Ph. D., Instructor in Physiology, Uni-
versity of California, Berkeley, Cal. (50). **F K**
Bancroft, John Sellers, M. E., 3310 Arch St., Philadelphia, Pa.
(51). **D**
- *Bancroft, Wilder Dwight, Professor of Chemistry, Cornell Uni-
versity, Ithaca, N. Y. (50). 1901. **B C**
- BANGS, LEMUEL BOLTON, M. D., 39 E. 72d St., New York, N. Y.
(36).
- *Bangs, Outram, 240 Beacon St., Boston, Mass. (47). 1900. **F**
Banker, Howard J., Prof. Biology, Southwestern Normal School,
California, Pa. (51). **G**
Banks, William C., Electrician, Gordon Battery Co., 439 E. 144th
St., New York, N. Y. (50). **D**
Barber, Amzi L., 7 E. 42d St., New York, N. Y. (49).
- *Barbour, Prof. Erwin Hinckley, Univ. of Nebraska, Lincoln,
Neb. (45). 1898. **E**
Barbour, Thomas, 50 White St., New York, N. Y. (50). **F**
Barck, Dr. Carl, 2715 Locust St., St. Louis, Mo. (52).
- *Bardeen, Charles Russell, Anatomical Laboratory, Wolfe and
Monument Sts., Baltimore, Md. (50). 1901. **F K**

MEMBERS AND FELLOWS.

- Bardeen, Charles William, 406 So. Franklin St., Syracuse, N. Y. (52).
- Bardwell, Darwin L., District Supt. of Schools, Borough of Richmond, Stapleton, N. Y. (52).
- Barkan, Adolph, M. D., LL.D., Mutual Savings Bank Bldg., San Francisco, Cal. (51). **K**
- *BARKER, PROF. G. F., 3909 Locust St., Philadelphia, Pa. (13). 1875. **B C**
- Barker, Mrs. Martha M., 42 Eleventh St., Lowell, Mass. (31). **E H**
- Barlow, John, A. M., State College of Agriculture, Kingston, R. I. (51). **F**
- *Barnard, Edward E., Yerkes Observatory, Williams Bay, Wis. (26). 1883. **A**
- Barnes, Albert, Clemson College, S. C. (49). **D**
- *Barnes, Charles Reid, Ph. D., Univ. of Chicago, Chicago, Ill. (33). 1885. **G**
- Barnes, Edward W., Box 446, New York, N. Y. (49).
- Barnett, Robert Crary, 3023 East 20th St., Kansas City, Mo. (51). **D**
- Barnhart, Arthur M., 185 Monroe St., Chicago, Ill. (42).
- *Barnhart, John H., M. D., Tarrytown, N. Y. (49). 1903. **G**
- Barnsley, George Thomas, C. E., Oakmont, Pa. (51). **D**
- *Barnum, Miss Charlotte C., Ph. D., U. S. Coast and Geodetic Survey, Washington, D. C. (36). 1896. **A**
- Barr, Charles Elisha, Professor of Biology, Albion College, Albion, Mich. (50). **F**
- Barr, John Henry, care of Smith Premier Typewriter Co., Syracuse, N. Y. (51). **D**
- Barrell, Joseph, Asst. Professor of Geology, Lehigh University, South Bethlehem, Pa. (51). **E**
- Barrie, Dr. George, Johns Hopkins Univ., Baltimore, Md. (49). **H I**
- Barringer, Daniel Moreau, Geologist and Mining Engineer, 460 Bullitt Building, Philadelphia, Pa. (50). **D E**
- Barrows, Franklin W., M. D., 45 Park St., Buffalo, N. Y. (47). **F**
- *Barrows, Walter B., Agricultural College, Mich. (40). 1897. **F**
- *Bartlett, Prof. Edwin J., Dartmouth College, Hanover, N. H. (28). 1883. **C**
- Bartlett, Francis, 40 State St., Boston, Mass. (50). **I**
- Bartlett, George Miller, Instructor in Physics and Mathematics, University of Michigan, Ann Arbor, Mich. (52). **B**
- *Bartlett, John R., Captain, U. S. N., Lonsdale, R. I. (30). 1882. **B E**
- *Bartley, Elias H., M. D., 21 Lafayette Ave., Brooklyn, N. Y. (33). 1894. **C**

MEMBERS AND FELLOWS.

- *Barton, G. E., 212 North 3d St., Millville, N. J. (46). 1898. **C**
- *Barton, George Hunt, Dept. of Geology, Mass. Inst. Tech., Boston, Mass. (47). 1900. **E**
- Barton, Philip Price, E. E., Sup't Niagara Falls Power Co., 127 Buffalo Ave., Niagara Falls, N. Y. (50). **D E**
- *Barton, Samuel M., Ph. D., The Univ. of the South, Sewanee, Tenn. (43). 1899. **A**
- Bartow, Edward, Ph. D., Kansas State University, Lawrence, Kan. (47). **C**
- Bartsch, Paul, Ph. D., Instructor in Zoology, Columbian Univ., Washington, D. C. (52). **F**
- *Barus, Carl, Ph. D., Wilson Hall, Brown Univ., Providence, R. I. (33). 1887. **B**
- Barwell, John William, Waukegan, Ill. (47).
- *Bascom, Miss Florence, Bryn Mawr College, Bryn Mawr, Pa. (42). 1897. **E**
- Bashore, Dr. Harvey B., West Fairview, Pa. (46). **E**
- *Baskerville, Charles, Univ. of North Carolina, Chapel Hill, N. C. (41). 1894. **C E**
- Baskett, James Newton, Mexico, Mo. (50). **F I**
- Bassett, Carroll Phillips, Ph. D., Civil and Consulting Engineer, Summit, N. J. (51). **D**
- Bates, Henry H., Ph. D., The Portland, Washington, D. C. (52). **A B D**
- Bates, Rev. John Mallery, Red Cloud, Neb. (51). **G I**
- Bauder, Arthur Russell, Instructor in Physics, Boardman High School, New Haven, Conn. (50). **B**
- *Bauer, Louis A., Ph. D., U. S. C. and G. Survey, Washington, D. C. (40). 1892. **A**
- Baumgardt, B. R., 626 W. 30th Street, Los Angeles, Cal. (51). **A**
- *Bausch, Edw., P. O. Drawer 1033, Rochester, N. Y. (26). 1883. **A B C F**
- Bausch, Henry, P. O. Drawer 1033, Rochester, N. Y. (41).
- Bawden, H. Heath, Professor of Psychology and Philosophy, Vassar College, Poughkeepsie, N. Y. (51). **F**
- Baxter, James Phinney, President, Maine Historical Society, Portland, Maine. (50). **H I**
- Beach, Miss Alice M., St. Anthony Park, Minn. (50). **F**
- Beach, Charles Coffing, M. D., 54 Woodland St., Hartford, Conn. (50). **F K**
- Beach, Henry Harris Aubrey, M. D., 28 Commonwealth Ave., Boston, Mass. (50). **F K**
- *Beach, Spencer Ambrose, N. Y. Agric. Exper. Station. Geneva, N. Y. (41). 1900. **G**

MEMBERS AND FELLOWS.

- Beach, William Harrison, Teacher of History and Civics, East Division High School, 229 Pleasant St., Milwaukee, Wis. (52).
- Beahan, Willard, Division Engineer, C. & N. W. Ry., 220 W. 6th St., Winona, Minn. (51). **D**
- Beal, Walter Henry, Assistant, Office of Experiment Stations, U. S. Dept. Agriculture, Washington, D. C. (52).
- *Beal, Wm. James, Ph. D., Professor of Botany, Agricultural College, Mich. (17). 1880. **G**
- Beaman, George Herbert, 2232 Mass. Ave., N.W., Washington, D. C. (52). **I**
- *Beardsley, Arthur E., Professor of Biology, Colorado State Normal School, Greeley, Colo. (50). 1901. **F**
- Beates, Henry, Jr., M. D., President of State Board of Medical Examiners, 1504 Walnut St., Philadelphia, Pa. (51). **K**
- Beatty, James W. F., Pitcairn, Pa. (51).
- Bebb, Edward C., U. S. Geological Survey, Washington, D. C. (52). **E**
- Becher, Franklin A., 234 Oneida St., Milwaukee, Wis. (41). **A I**
- Beck, Carl, M. D., Professor of Surgery in New York Postgraduate Medical School and President of St. Mark's Hospital, 37 E. 31st St., New York, N. Y. (51). **K**
- *Becker, Dr. Geo. F., U. S. Geol. Survey, Washington, D. C. (36). 1890. **E**
- Beckwith, Miss Florence, 394 Alexander St., Rochester, N. Y. (45). **G**
- *Bedell, Frederick, Ph. D., Cornell Univ., Ithaca, N. Y. (41). 1894. **A B**
- Beede, Joshua William, Indiana University, Bloomington, Ind. (50). **E**
- Beekman, Gerard, 47 Cedar St., New York, N. Y. (49).
- Beers, M. H., 410 Broadway, New York, N. Y. (50). **I**
- Behrend, Bernhard Arthur, C. E., E. E., Station H, Cincinnati, Ohio. (50). **D E**
- *Bell, Alex. Graham, Ph. D., 1331 Conn. Ave., N.W., Washington, D. C. (26). 1879. **B H I**
- *Bell, Alex. Melville, 1525 35th St., Washington, D. C. (31). 1885. **H**
- Bell, A. T., Professor of Botany, Wesleyan Univ., University Place, Neb. (52). **G**
- BELL, C. M., M. D., 320 Fifth Ave., New York, N. Y. (36).
- Bell, George, Mineralogist, 200 S. Washington Ave., Denver, Colo. (50). **E G**
- Bell, Guido, M. D., 431 E. Ohio St., Indianapolis, Ind. (51). **K**
- *Bell, Robert, M. D., LL.D., F. R. S., Geol. Survey, Ottawa, Can. (38). 1889. **E F**

MEMBERS AND FELLOWS.

- Bellows, Horace M., M. D., Huntingdon Valley, Pa. (51). **K**
- Belmont, August, 23 Nassau St., New York, N. Y. (50). **I**
- *Beman, Wooster W., 813 E. Kingsley St., Ann Arbor, Mich. (34). 1886. **A**
- Bement, A., 218 La Salle St., Chicago, Ill. (52).
- Bēndrat, Rev. Thomas Albert, Tea, So. Dak. (52).
- Benedict, Harris Miller, Instructor in Biology, University of Cincinnati, 103 West St. Clair St., Cincinnati, Ohio. (52). **F**
- Benedict, James H., 14 E. 70th St., New York, N. Y. (49)
- Benham, J. W., 26 West 23d St., New York, N. Y. (52). **H**
- *BENJAMIN, MARCUS, U. S. National Museum, Washington, D. C. (27). 1887. **C I**
- *Benjamin, Rev. Raphael, Hotel St. George, Brooklyn, N. Y. (34). 1887. **E F G H**
- *Bennesson, Miss Cora Agnes, A. M., LL. B., 4 Mason St., Cambridge, Mass. (47). 1899. **H I**
- Bennett, Charles W., Coldwater, Mich. (50). **E**
- Bennett, Edward, Electrical Engineer, Amber Club, Pittsburg, Pa. (52). **D**
- Bennett, Henry C., 4th Flat, 1692 Broadway, New York, N. Y. (43).
- Bennett, Rev. N. E., Wilmington, Ohio. (47). **A**
- Bennett, William Z., Ph. D., Director of Chemical Laboratory, Univ. of Wooster, Wooster, Ohio. (48). **C**
- Benson, Frank Sherman, 214 Columbia Heights, Brooklyn, N. Y. (49).
- Bentley, William B., Ohio University, Athens, Ohio. (51). **C**
- Bentley, Wilson A., Nashville, Vt. (48).
- Benton, John Robert, Ph. D., 132 A St., N.E., Washington, D. C. (51). **B**
- *Bergey, David H., S. E. cor. 34th and Locust Sts., Philadelphia, Pa. (48). 1903. **K**
- *Bergström, John Andrew, Ph. D., Associate Professor of Psychology and Pedagogy, Indiana University, Bloomington, Ind. (50). 1901. **I**
- Berkeley, Wm. N., Ph. D., Box 65, San Juan, Porto Rico. (49). **C**
- Berkey, Charles Peter, Ph. D., Instructor in Mineralogy, University of Minnesota, Minneapolis, Minn. (50). **E**
- Bermann, I., M. D., The Plaza, Washington, D. C. (49). **H**
- Bernays, Augustus Charles, M. D., 3623 Laclede Ave., St. Louis, Mo., (50). **F K**
- Bernheimer, Charles L., 43 E. 63d St., New York, N. Y. (49).
- Berry, Daniel, M. D., Carmi, Ill. (41). **B C E**
- Berry, Edgar H., care C. W. Hunt Co., West New Brighton, N. Y. (50). **D**

- Berry, Edward W., News Building, Passaic, N. J. (50). **G**
- Berry, John Wilson, C. E., Pittston, Pa. (47).
- *Bessey, Charles Edwin, Ph. D., LL.D., Univ. of Nebraska, Lincoln, Neb. (21). 1880. **G**
- *Bessey, Ernst A., U. S. Dep't Agriculture, Washington, D. C. (49). 1901. **G**
- Bessey, J. Mortimer, M. D., 1814 Adams St., Toledo, Ohio. (51). **K**
- Best, John E., M. D., Arlington Heights, Ill. (51). **E F H K**
- Bethea, Solomon Hix, U. S. Attorney, Chicago Club, Chicago, Ill. (50). **I**
- *Bethune, Rev. C. J. S., 500 Dufferin Ave., London, Ontario, Canada. (18). 1875. **F**
- Bevier, Miss Isabel, Univ. of Illinois, Urbana, Ill. (46). **C**
- *Beyer, Prof. Samuel W., Iowa Agricultural College, Ames, Iowa. (47). 1900. **E**
- Beyer, T. Raymond, C. E., 119 Maplewood Ave., Germantown, Pa. (52).
- *Bickmore, Prof. Albert S., Amer. Mus. Nat. History, Central Park, New York, N. Y. (17). 1880. **H**
- Biddle, James G., 1024 Stephen Girard Building, Philadelphia, Pa. (33).
- Bien, Julius, 140 Sixth Ave., New York, N. Y. (34). **E H**
- Bierly, Prof. H. E., State Seminary, Tallahassee, Fla. (49). **H**
- Bierwirth, Julius C., M. D., 137 Montague St., Brooklyn, N. Y. (51). **K**
- *Bigelow, Prof. Frank H., U. S. Weather Bureau, Washington, D. C. (36). 1888. **A**
- Bigelow, Henry Bryant, Cohasset, Mass. (52).
- *Bigelow, Maurice Alpheus, Ph. D., Instructor in Biology, Teachers' College, Columbia Univ., New York, N. Y. (51). 1903. **F**
- *Bigelow, Robert Payne, Ph. D., Mass. Institute of Technology, Boston, Mass. (51). 1903. **F**
- Bigelow, Samuel Lawrence, Ph. D., Asst. Professor of General Chemistry, University of Michigan, Ann Arbor, Mich. (51). **C**
- Biggar, Hamilton F., M. D., 176 Euclid Ave., Cleveland, Ohio. (40). **B F**
- Biggins, J. Edgar, 1329 Federal St., Allegheny, Pa. (52). **C**
- Biggs, Charles, 13 Astor Place, New York, N. Y. (50). **I**
- Bigney, Andrew J., Professor of Biology and Geology, Moores Hill College, Moores Hill, Ind. (50). **E F**
- Billings, Miss E., 279 Madison Ave., New York, N. Y. (50). **I**
- Birge, Edward A., Dean of College of Letters and Science, University of Wisconsin, Madison, Wis. (53).
- BISHOP, HEBER R., Mills Building, New York, N. Y. (36).
- Bishop, James Hall, 2309 Washington St., San Francisco, Cal. (51). **H**

MEMBERS AND FELLOWS.

- Bishop, Mrs. Josephine Hall, 2309 Washington St., San Francisco, Cal. (51). **H**
- Bishop, L. B., M. D., 356 Orange St., New Haven, Conn. (50). **I**
- Bissell, Leslie Dayton, Ph. D., Hotchkiss School, Lakeville, Conn. (50). **B**
- Bitner, Henry F., Ph. D., Teacher of Natural Science, Millersville State Normal School, Millersville, Pa. (52). **B C G**
- *BIXBY, MAJOR W. H., Corps of Engineers, U. S. A., U. S. Engineer Office, Jones Bldg., Detroit, Mich. (34). 1892. **D**
- Black, Homer V., Georgia School of Technology, Atlanta, Ga. (52). **C**
- Black, Newton Henry, 26 Trowbridge St., Cambridge, Mass. (50). **B**
- Blackall, Clarence Howard, Architect, 1 Somerset St., Boston, Mass. (50). **D**
- Blackburn, Joseph E., State Dairy and Food Commissioner, Columbus, Ohio, (50). **F I**
- *Blackmar, Frank Wilson, Professor of Sociology and Economics, University of Kansas, Lawrence, Kan. (50). 1903. **H I**
- Blackmore, Henry S., 206 S. 9th Ave., Mount Vernon, N. Y. (49).
- Blackshear, Edward Levoisier, Principal of the Prairie View State Normal and Industrial College, Prairie View, Texas. (52). **H I**
- Blain, Alexander W., Jr., 131 Elmwood Ave., Detroit, Mich (52).
- *Blair, Andrew Alexander, 406 Locust St., Philadelphia, Pa. (44). 1896. **C**
- Blair, Mrs. Eliza N., Manchester, N. H. (40).
- *Blake, Clarence J., M. D., 226 Marlborough St., Boston, Mass. (24). 1877. **B F**
- *Blake, Edwin Mortimer, 1910 Addison St., Berkeley, Cal. (43). 1901. **A**
- *Blake, Francis, Auburndale, Mass. (23). 1874. **A B**
- Blake, Fred C., Boulder, Colo. (50). **C**
- Blake, John Bapst, M. D., 302 Beacon St., Boston, Mass. (50). **F K**
- Blake, Joseph A., M. D., 601 Madison Ave., New York, N. Y. (50). **F K**
- Blakeman, Mrs. Birdseye, 9 E. 44th St., New York, N. Y. (49).
- Blaker, Ernest, Instructor in Physics, Cornell University, Ithaca, N. Y. (51). **B**
- Blakeslee, Albert Francis, 12 Kirkland Place. Cambridge, Mass. (52).
- Blakeslee, Olin Safford, Magnolia, Colo. (50). **B D E**
- Blanchard, Arthur Horace, C. E., Instructor in Engineering, Brown University, Providence, R. I. (52). **B D**

MEMBERS AND FELLOWS.

- Bland, John Carlisle, Engineer of Bridges, Penna. Lines West of
Pittsburg, 1003 Penn Ave., Pittsburg, Pa. (51). **D**
- Blankinship, Joseph William, Ph. D., Professor of Botany, Mon-
tana State College, Bozeman, Montana. (51). **G**
- Blasdale, Walter Charles, Ph. D., Instructor in Chemistry, Uni-
versity of California, Berkeley, Cal. (50). **C**
- Blauvelt, Harrington, Mining Engineer, Prescott, Arizona, (51).
D E
- *Bleile, Albert M., M. D., State University, Columbus, Ohio. (37).
1896. **F**
- BLISH, W. G., Niles, Mich. (33). **B D**
- Bliss, Charles B., Ph. D., Hampden, Mass. (49). **H I**
- Bliss, Hon. Cornelius N., 117 Duane St., New York, N. Y. (49).
- Blodgett, Frederick H., Asst. Professor of Botany, Agricultural
College, College Park, Md. (52). **G**
- Bloodgood, John H., 6 W. 40th St., New York, N. Y. (49).
- BLOUNT, HENRY FITCH, "The Oaks," Washington, D. C. (32). **B I**
- Blum, Sanford, M. D., 1243 Franklin St., San Francisco, Cal. (52). **K**
- Boas, Emil L., 37 Broadway, New York, N. Y. (50). **I**
- *Boas, Dr. Franz, Am. Mus. Nat. History, Central Park, New
York, N. Y. (36). 1888. **H I**
- *Bodine, Prof. Donaldson, Wabash College, Crawfordsville, Ind.
(45). 1899. **E F**
- *Bogert, Marston Taylor, Havemeyer Hall, Columbia Univ.,
New York, N. Y. (47). 1900. **C**
- Boggs, Lemuel Stearns, care Sargent & Lundy, 1000 Isabella
Bld'g, Chicago, Ill. (50). **D**
- Boies, Henry Martyn, President Moosic Powder Co., 530 Clay Ave.,
Scranton, Pa. (50). **C**
- Bolce, Harold, The Franconia, Washington, D. C. (52). **D F G**
- Bolles, Newton Alden, 1457-59 Ogden St., Denver, Colo. (50). **C**
- *Bolley, Henry L., Agricultural College, North Dakota. (39). 1892. **G**
- *Bolton, Thaddeus L., Ph. D., Dept. Philosophy, University of
Nebraska, Lincoln, Neb. (50). 1901. **H I**
- Bond, Fred, State Engineer, Cheyenne, Wyoming. (50). **D**
- *Bond, Geo. M., 141 Washington St., Hartford, Conn. (33).
1885. **D**
- Bond, R. I., M. D., Hartshorne, Ind. Ter. (50). **K**
- *Bookman, Samuel, Ph. D., 9 E. 62d St., New York, N. Y. (47).
1900. **C**
- Boon, John Daniel, Professor of Physics, Chemistry and Geology,
John Tarleton College, Stephenville, Texas. (50). **B C E**
- Booraem, J. V. V., 204 Lincoln Place, Brooklyn, N. Y. (36).
- Booth, Edward, Instructor in Chemistry, Univ. of California,
Berkeley, Cal. (50). **C**

MEMBERS AND FELLOWS.

- *Booth, Miss Mary A., 60 Dartmouth St., Springfield, Mass. (34).
1894. **F G I**
- Bossi, Arnold L., Ph. D., Chemist and Colorist, Manchester Mills,
Manchester, N. H. (50). **C**
- Boston, L. Napoleon, M. D., 1531 S. Broad St., Philadelphia,
Pa. (51). **K**
- Boucek, Anthony J., M. D., 624 Chestnut St., Allegheny, Pa.
(51). **K**
- *Bouscaren, Louis Frederic Gustav, Chief Engineer, Water Works
Commission, City Hall, Cincinnati, Ohio. (50). 1901. **D**
- *Bouton, Charles Leonard, Instructor in Mathematics, Harvard
University, Cambridge, Mass. (50). 1901. **A**
- Boutwell, John Mason, U. S. Geol. Survey, Washington, D. C.
(46). **E**
- *Bowditch, Charles P., 28 State St., Boston, Mass. (43). 1897. **H**
- Bowditch, Miss Charlotte, Pond St., Jamaica Plain, Mass. (50). **I**
- *Bowditch, Prof. H. P., Jamaica Plain, Mass. (28). 1880. **B F H**
- Bowker, R. R., 28 Elm St., New York, N. Y. (43). **B**
- Bowlus, E. Lingan, Professor of Biology, Monmouth College,
Monmouth, Ill. (50). **F**
- Bowman, Charles Henry, Professor of Mechanics and Electrical
Engineering, State School of Mines, Butte, Mont. (51). **D**
- Bowman, Joseph H., Resident Engineer, Vera Cruz and Pacific
Ry., Apartado 21, Cordoba, Mexico. (50). **D**
- Bownocker, Prof. J. A., Ohio State University, Columbus, Ohio.
(48). **E**
- *Bowser, Prof. E. A., Rutgers College, New Brunswick, N. J. (28).
1881.
- *Boyd, James E., Ohio State Univ., Columbus, Ohio. (46). 1899.
B D
- *BOYE, MARTIN H., M. D., Coopersburg, Pa. (1). 1896. **C**
- *Brace, Prof. D. B., Univ. of Nebraska, Lincoln, Neb. (48). 1900. **B**
- *Bracken, Henry Martyn, M. D., 1010 Fourth St. S.E., Minneapolis,
Minn. (51). 1903. **K**
- BRACKENRIDGE, GEORGE W., San Antonio, Texas. (41). **I**
- Brackett, Byron B., Ph. D., Rutgers College, New Brunswick, N. J.
(46). **B**
- *Brackett, Prof. C. F., Princeton University, Princeton, N. J.
(19). 1875. **B**
- Brackett, Frank Parkhurst, Professor of Mathematics, Pomona
College, Claremont, Cal. (50). **A**
- *Brackett, Richard N., Clemson College, S. C. (37). 1891. **C E**
- *Bradford, Royal B., Commander, U. S. N., Navy Dept., Wash-
ington, D. C. (31). 1891. **B D**
- BRADLEY, ARTHUR C., Newport, N. H. (43).

MEMBERS AND FELLOWS.

- Bradley, Charles S., 44 Broad St., New York, N. Y. (40).
 Bradley, Charles Whiting, 1064 Ellicott Square, Buffalo, N. Y. (51). **D**
 BRADLEY, MILTON, Springfield, Mass. (44). **B**
 BRADLEY, M. J., 373 Fulton St., Brooklyn, N. Y. (43).
 BRADLEY, STEPHEN ROWE, Nyack, New York. (51).
 Bradley, Walter Parke, Ph. D., Professor of Chemistry, Wesleyan University, Middletown, Conn. (50). **C**
 Brainerd, Erastus, Seattle, Wash. (52).
 Bramwell, Geo. W., 335 Broadway, New York, N. Y. (43). **D**
 *Branner, Prof. John C., Stanford University, Cal. (34). 1886. **E F**
 Brasefield, Stanley Eugene, Instructor in Mathematics, Lafayette College, Easton, Pa. (50). **A**
 *BRASHEAR, JOHN A., Allegheny, Pa. (33). 1885. **A B D**
 Braunnagel, Jules L. A., M. D., P. O. Box 925, San Antonio, Texas. (50). **F**
 *Bray, William L., Professor of Botany, Univ. of Texas, Austin, Texas. (49). 1901. **G**
 Brayton, Sarah H., M. D., The Hereford, Evanston, Ill. (33).
 Breed, Robert Stanley, Ph. D., Professor of Biology, Allegheny College, Meadville, Pa. (51). **F**
 Brett, George P., Darien, Conn. (49).
 Brewer, Charles Edward, Professor of Chemistry, Wake Forest College, Wake Forest, N. C. (50). **C**
 *Brewer, Prof. Wm. H., 418 Orange St., New Haven, Conn. (20). 1875. **E F I**
 Brewster, Edwin Tenney, Instructor in Natural Sciences, Phillips Academy, Andover, Mass. (51).
 Brewster, Frank H., M. E., Birmingham Iron Foundry, P. O. Box 418, Derby, Conn. (51). **D**
 Brice, Judge Albert G., 901 Hennen Bldg., New Orleans, La. (32). **H**
 Bridge, Norman, M. D., 100 Grand Ave., Pasadena, Cal. (51). **K**
 Briggs, Edward Cornelius, Harvard Medical School, Boston, Mass. (50). **F K**
 *Briggs, Lyman J., U. S. Dept. Agriculture, Washington, D. C. (48). 1901. **B**
 Briggs, Wallace Alvin, M. D., 212½ J St., Sacramento, Cal. (51). **K**
 *Brigham, Albert Perry, Professor of Geology, Colgate Univ., Hamilton, N. Y. (41). 1900. **E**
 Bright, Richard Riggs, Ordnance Bureau, Navy Dept., Washington, D. C. (52). **D**
 Brill, George M., Consulting Engineer, 1134 Marquette Building, Chicago, Ill. (51). **D**
 Bristol, John I. D., Metropolitan Building, New York, N. Y. (49).

*Bristol, Wm. H., Stevens Institute, Hoboken, N. J. (36). 1894.

A B D

Brittin, Lewis H., Ansonia, Conn. (52). **H**

*Britton, N. L., Ph. D., N. Y. Botanical Garden, Bronx Park, New York, N. Y. (29). 1882. **E G**

Britton, Wilev. Special Pension Examiner, Springfield, Mo. (40). **F**

Brock, Luther S., M. D., Morgantown, W. Va. (51). **K**

Brodhead, Mark, 1733 19th St., N.W., Washington, D. C. (52).

Brodie, Paul Thomas, Professor of Mathematics, Clemson College, Clemson College, S. C. (50). **A**

Bronson, Dr. E. B., 10 W. 34th St., New York, N. Y. (49).

Brooks, Albert A., High School, Kansas City, Kan. (50). **F G**

Brooks, Alfred Hulse, U. S. Geological Survey, Washington, D. C. (52). **E**

Brooks, Charles Edward, Lake Roland, Md. (52). **A**

Brooks, Rev. Earle Amos, Waverly, W. Va. (50). **F**

Brooks, Morgan, Professor of Electrical Engineering, Univ. of Illinois, Urbana, Ill. (50). **D**

Brooks, Wm. Keith, M. D., Johns Hopkins Univ., Baltimore, Md. (52). **K**

Brooks, Prof. Wm. P., Amherst, Mass. (38). **C F**

*Brooks, Wm. R., D. Sc., Director Smith Observatory and Professor of Astronomy, Hobart College, Geneva, N. Y. (35). 1886. **A B D**

Broome, G. Wiley, M. D., Mo. Trust Building, St. Louis, Mo. (51). **K**

Browne, Aldis B., 1419 F St. N.W., Washington, D. C. (52). **I**

Brown, Amos Peaslee, Ph. D., Assistant Professor of Geology and Mineralogy, Univ. of Pennsylvania, Philadelphia, Pa. (50). **E**

Brown, Arthur Erwin, Secy. Zoological Society of Philadelphia, 1208 Locust St., Philadelphia, Pa. (51). **F**

Brown, Austin H., Jr., Genl. Mgr. Trinity Copper Co., Kennett, Cal. (52). **D**

*Brown, Mrs. Caroline R., Observatory Place, New Haven, Conn. (17). 1874.

Browne, Charles A., Jr., Ph. D., Exper. Station, Audubon Park, New Orleans, La. (52).

Brown, Rev. Clement, 1440 M St., N.W., Washington, D. C. (52).

Brown, Edgar, Botanist in charge of Seed Laboratory, Department Agriculture, Washington, D. C. (52). **G**

Brown, Elisha Rhodes, President Stafford Savings and National Banks, 50 Silver St., Dover, N. H. (50). **I**

Brown, Ellis W., Supervising Principal of Public Schools, 924 24th St., N.W., Washington, D. C. (52).

Brown, George P., President The Public School Publishing Co., Bloomington, Ill. (52). **I**

MEMBERS AND FELLOWS.

- Brown, George S., M. D., 2220 1st Ave., Birmingham, Ala. (51). **K**
 Brown, Glenn V., 1302 Jefferson St., Wilmington, Del. (51). **B C E**
 Brown Harold W., Delaware College, Newark, Del. (48). **B C**
 Brown, John C., Instructor in Zoology, Univ. of Minnesota,
 Minneapolis, Minn. (52). **F K**
 BROWN, JOSEPH STANFORD, 489 Fifth Ave., New York, N. Y. (50).
D
 Brown, Newton H., Delaware College, Newark, Delaware. (48). **B D**
 Brown, Philip King, M. D., 1303 Van Ness Ave., San Francisco,
 Cal. (51). **K**
 *Brown, Robert, Yale University Observatory, New Haven, Conn.
 (11). 1874. **A**
 Brown, Robert Marshall, 35 Eighth St., New Bedford, Mass. (48).
 Brown, Samuel B., Morgantown, W. Va. (40). **E**
 Brown, Stewardson, 20 E. Penn St., Germantown, Pa. (50). **I**
 *Brown, S. J., U. S. Naval Academy, Annapolis, Md. (49). 1902. **A**
 Brown, W. L., 42 West 72d St., New York, N. Y. (50). **I**
 Brownell, Silas B., 71 Wall St., New York, N. Y. (36).
 Browning, Charles Clifton, M. D., Highland, Cal. (51). **K**
 *Browning, Philip Embury, Kent Chemical Laboratory, Yale Uni-
 versity, New Haven, Conn. (46). 1903. **C**
 Bruggerhof, F. W., 36 Cortlandt St., New York, N. Y. (49).
 Brundage, Albert H., M. D., 1073 Bushwick Ave., Brooklyn,
 N. Y. (43). **F G H**
 Bruner, Henry Lane, Ph. D., Professor of Biology, Butler College,
 Indianapolis, Ind. (50). **F**
 *Bruner, Lawrence, Professor of Entomology, Univ. of Nebraska,
 Lincoln, Neb. (50). 1901. **F**
 BRUNTON, DAVID WILLIAM, Mining Engineer, 865 Grant Ave.,
 Denver, Colo. (50). **D E**
 *Brush, Charles F., 1003 Euclid Ave., Cleveland, Ohio. (35). 1886. **B**
 *BRUSH, PROF. GEORGE J., Yale Univ., New Haven, Conn. (4).
 1874. **C E**
 Bryan, Joseph Hammond, 818 17th St., Washington, D. C. (52).
 Bryan, Dr. Walter, Instructor in Biology, College of City of New
 York, 42 East 28th St., New York, N. Y. (52). **F**
 *Bryan, Prof. William L., Indiana Univ., Bloomington, Ind. (49).
 1900. **H**
 Bryant, Miss D. L., 218 Ashe St., Greensboro, N. C. (42). **E**
 Bryant, Henry G., 2013 Walnut St., Philadelphia, Pa. (51). **E**
 Bryson, Andrew, C. E., Brylgon Foundry, Reading, Pa. (51). **D**
 Buchanan, James Isaac, Vice-President Pittsburg Trust Co., 6108
 Walnut St., Pittsburg, Pa. (51). **I**
 Buchholz, Carl Waldemar, Chief Engineer, Erie R.R. Co., 21
 Cortlandt St., New York, N. Y. (51). **D E**

MEMBERS AND FELLOWS.

- *Buchner, Edward Franklin, Ph. D., Professor of Philosophy and Pedagogy, University of Alabama, University, Ala. (49). 1901. **H**
- *Buckhout, W. A., State College, Pa. (20). 1881. **F**
 Buckingham, Chas. L., 38 Park Row, New York, N. Y. (28).
 BUCKLEY, ERNEST ROBERTSON, Ph. D., Director Bureau of Geology and Mines and State Geologist of Missouri, Rolla, Mo. (52). **E**
- Budington, Robert A., Mt. Hermon, Mass. (52). **F K**
- Buffum, Burt C., Professor of Agriculture, Agricultural College, Laramie, Wyo. (42). **G**
- Buist, John Robinson, M. D., City Board of Health, Nashville, Tenn. (50). **K**
- Bull, Coates P., Assistant Professor Agr., Univ. of Minnesota, St. Anthony Park, Minn. (52). **D G**
- *Bull, Prof. Storm, University of Wisconsin, Madison, Wis. (44). 1897. **D**
- Bullard, Warren Gardner, Ph. D., Associate Professor of Mathematics, Syracuse University, Syracuse, N. Y. (50). **A**
- Bullene, Mrs. Emma F. Jay, 1431 Court Place, Denver, Colo. (50). **H**
- *Bumpus, H. C., Am. Mus. Nat. Hist., New York, N. Y. (49). 1900.
- Bunker, Henry A., M. D., 158 Sixth Ave., Brooklyn, N. Y. (50). **I**
- Bunn, J. F., Attorney at Law, Tiffin, Ohio, (51). **B**
- *Burbank, Luther, Santa Rosa, Cal. (50). 1901. **G**
- Burbidge, Frederick, 510 Empire State Building, Spokane, Wash. (50). **D E**
- Burchard, Anson W., 44 Broad St., New York, N. Y. (51). **D**
- Burdell, W. J., M. D., Lugoff, S. C. (51). **K**
- Burdick, Lewis Dayton, Oxford, N. Y. (52).
- *Burgess, Edward S., 11 W. 88th St., New York, N. Y. (47). 1901. **G**
- *Burgess, Thomas J. W., M. D., Medical Supt. Protestant Hospital for the Insane, Montreal, Can. (38). 1889. **G**
- Burke, M. D., C. E., 404 Pike Bldg., Cincinnati, Ohio. (50). **A B C D E**
- Burke, Robert E., Instructor in Chemistry, Mechanic Arts High School, Boston, Mass. (50). **C**
- Burnham, George, Jr., C. E., Burnham, Williams & Co., Baldwin Locomotive Works, 214 N. 34th St. Philadelphia, Pa. (51). **D**
- *Burr, Prof. William H., Columbia University, New York, N. Y. (31). 1883.
- Burrell, Herbert Leslie, M. D., 22 Newbury St., Boston, Mass. (51). **K**
- Burrell, Ramón Haddock, M. D., Creighton, Neb. (51). **K**
- Burroughs, Paul R., Allison, Iowa. (50). **C**

MEMBERS AND FELLOWS.

- *Burt, Edward Angus, Ph. D., Professor of Natural History, Middlebury College, Middlebury, Vt. (50). 1901. **G**
- Burton, Prof. Alfred E., Mass. Inst. Technology, Boston, Mass. (40). **E**
- Burton, Standish Barry, Civil and Mining Engineer, Saltillo, Coahuila, Mexico. (51). **D**
- Burton, Hon. Theodore E., Cleveland, Ohio. (52). **I**
- Burton-Opitz, Russell, Instructor in Physiology, Columbia University, New York, N. Y. (52). **K**
- Busch, Frederick Carl, M. D., 145 Allen St., Buffalo, N. Y. (49).
- Bush, John C. F., M. D., Wahoo, Neb. (51). **K**
- Bushnell, D. I., Jr., Assistant in Archæology, Peabody Museum, Cambridge, Mass. (52). **H**
- *Butler, Amos W., Secretary Board of State Charities, Indianapolis, Ind. (30). 1885. **F H**
- Butler, Frank Edward, President of Grayson College, White-wright, Texas. (50). **I**
- Butler, Matthew Joseph, Civil Engineer, 877 Dorchester St., Montreal, P. Q., Canada. (51). **D**
- Butterfield, Arthur Dexter, Assistant Professor of Mathematics, University of Vermont, Burlington, Vt. (50). **A D**
- Butts, Edward Pontany, C. E., Chief Engineer, Am. Writing Paper Co., Holyoke, Mass. (51). **D**
- Byrnes, Owen, Mining Engineer, P. O. Box 131, Marysville, Montana. (51). **D E**
- Cabot, Samuel, Manufacturing Chemist, 70 Kilby St., Boston, Mass (50). **C**
- Cady, Hamilton Perkins, Assistant Professor of Chemistry, University of Kansas, Lawrence, Kansas. (52). **B C**
- Cady, Walter G., Ph. D., Wesleyan Univ., Middletown, Conn. (49). **B**
- *Cain, William, Professor of Mathematics, University of North Carolina, Chapel Hill, N. C. (50). 1901. **A D**
- *Cajori, Florian, Professor of Mathematics, Colorado College, Colorado Springs, Colo. (50). 1901. **A**
- Calder, George, 105 East 22d St., New York, N. Y. (50).
- *Caldwell, Prof. George C., Cornell University, Ithaca, N. Y. (23). 1875. **C**
- *Caldwell, Prof. Otis W., State Normal School, Charleston, Ill. (49). 1902. **G**
- *Calkins, Gary N., Columbia University, New York, N. Y. (49). 1901. **F**
- Calkins, Marshall, M. D., 14 Maple St., Springfield, Mass. (29).
- *Calvert, Philip P., Ph. D., Instructor in Zoology, Biological Hall, University of Pennsylvania, Philadelphia, Pa. (50). 1903. **F**

MEMBERS AND FELLOWS.

- Calvert, Prof. Sidney, Univ. of Missouri, Columbia, Mo. (47). **C**
- *Calvin, Prof. Samuel, Dir. Iowa Geol. Surv., Iowa City, Iowa. (37). 1889. **E F**
- Came, Virgil M., 315 Quincy Building, Denver, Colo. (50). **E**
- *Cameron, Frank K., Ph. D., Chemist, Bureau of Soils, U. S. Dept. Agriculture, Washington, D. C. (49). 1901. **C**
- Cammann, Hermann H., 51 Liberty St., New York, N. Y. (49).
- *Campbell, Douglas H., Professor of Botany, Stanford University, Cal. (34). 1888. **G**
- Campbell, Henry Donald, Professor Geology and Biology, Washington and Lee University, Lexington, Va. (52). **E F G**
- Campbell, Leslie Lyle, Ph. D., Westminster College, Fulton, Mo. (48).
- Campbell, Marius Robison, U. S. Geological Survey, Washington, D. C. (52). **E**
- *CAMPBELL, WILLIAM WALLACE, Director of Lick Observatory, Mt. Hamilton, Cal. (50). 1901. **A**
- *Canby, William M., 1101 Delaware Avenue, Wilmington, Del. (17). 1878. **G**
- *Cannon, George Lyman, Instructor in Geology, Denver High School (No. 1), Denver, Colo. (39). 1901. **E**
- Cannon, W. A., Ph. D., Tucson, Arizona. (52). **G**
- Card, Fred. W., Professor of Horticulture, R. I. Coll. Agr. and Mech. Arts, Kingston, R. I. (45). **G**
- Carey, Everett P., Petaluma, Cal. (50). **B C**
- Cargill, Geo. W., Attorney at Law, Charleston, W. Va. (51). **B D F G**
- *Carhart, Prof. Henry S., Univ. of Michigan, Ann Arbor, Mich. (29). 1881. **B**
- *Carleton, M. A., U. S. Dept. Agriculture, Washington, D. C. (42). 1894. **G**
- Carlson, Anton Julius, Ph. D., Stanford University, Cal. (52). **K**
- Carnaghan, Edwin Dixon, Mechanical Engineer, Villa Corona, Mexico. (50). **D**
- Carnahan, Charles T., Mining Engineer, Equitable Building, Denver, Colo. (50). **D E**
- Carnegie, Thomas Morrison, Trustee of Carnegie Institute, Dungeness, Fernandina, Fla. (50). **F**
- Carpenter, Ford A., U. S. Weather Bureau, San Diego, Cal. (44). **B**
- Carpenter, Franklin R., Ph. D., Mining Expert, 1420 Josephine St. Denver, Colo. (50). **D E**
- *Carpenter, Louis G., Agric. College, Fort Collins, Colo. (32). 1889. **A B**
- Carr, William Kearny, 1413 K St., N.W., Washington, D. C. (52).
- Carr, William Phillips, M. D., 1418 L St., N.W., Washington, D. C. (51). **K**

MEMBERS AND FELLOWS.

- *Carroll, James, M. D., 2147 F St., N.W., Washington, D. C. (50).
1903. **F K**
- Carroll, James J., Waco, Texas. (50). **F**
- Carrow, Flemming, M. D., University of Michigan, Ann Arbor, Mich. (51). **K**
- Carson, Shelby Chadwick, M. D., Greensboro, Ala. (51). **K**
- Carss, Miss Elizabeth, Teachers' College, New York, N. Y. (49). **G**
- Carter, Henry C., 491 Bradford St., North Andover, Mass. (50).
- Carter, James, M. D., Rawlins, Wyoming. (50). **E K**
- CARTER, JAMES C., 277 Lexington Ave., New York, N. Y. (36).
- *Carter, James Madison G., M. D., Waukegan, Ill. (39). 1895. **F**
- Carter, John E., Knox and Coulter Sts., Germantown, Pa. (53).
B H
- Carter, Marion H., 504 West 143d St., New York, N. Y. (49).
- Carter, William Harrison, Stone Mountain, Ga. (50). **A**
- *Carus, Paul, Ph. D., Editor Open Court Pub. Co., 324 Dearborn St., Chicago, Ill. (40). 1895. **H**
- Cary, Mrs. Elizabeth M. L., 184 Delaware Ave., Buffalo, N. Y. (45).
E
- Case, Eckstein, Case School of Applied Science, Cleveland, Ohio. (47).
- Case, Ermine Cowles, Prof. of Chemistry and Geology, State Normal School, Milwaukee, Wis. (50). **B C E**
- *Casey, Thomas L., Major of Engineers, U. S. A., P. O. Drawer 71, St. Louis, Mo. (38). 1892. **D F**
- Castle, W. E., Instructor in Zoology, Harvard Univ., Cambridge, Mass. (52). **F**
- Caswell, W. H., M. D., 201 West 55th St., New York, N. Y. (50).
- Cathcart, Miss J. R., The Barnard, 71st St. and Central Park, New York, N. Y. (50).
- *Catlin, Charles A., 133 Hope St., Providence, R. I. (33). 1895. **C**
- Catt, George William, C. E., President, Atlantic, Gulf and Pacific Co., Park Row Building, New York, N. Y. (51). **D**
- *Cattell, H. W., M. D., 3709 Spruce St., Philadelphia, Pa. (50). 1901. **K**
- *CATTELL, PROF. JAMES MCKEEN, Columbia Univ., New York, N. Y. (44). 1896. **B F H I**
- Cerna, Dr. David, Monclova, Coahuila, Mexico. (51).
- Chadbourn, Erlon R., Lewiston, Me. (29).
- Chadwick, Leroy S., 1824 Euclid Ave., Cleveland, Ohio. (51).
- *Chaillé, Stanford E., M. D., LL.D., Dean of Medical Department, Tulane University, New Orleans, La. (51). 1903. **K**
- *Chamberlain, Charles Joseph, Dept. of Botany, University of Chicago, Chicago, Ill. (50). 1902. **G**
- Chamberlain, Frederic M., U. S. Fish Commission, Washington, D. C. (51). **F**

MEMBERS AND FELLOWS.

Chamberlain, Paul Mellen, Prof. of Mechanical Engineering, Lewis Institute, Chicago, Ill. (51). **D**

Chamberlin, Rollin Thomas, Hyde Park Hotel, Chicago, Ill. (50).

C E

*Chamberlin, T. C., Head of Dept. of Geology, Univ. of Chicago, Chicago, Ill. (21). 1877. **B E F H**

Chamberlin, W. E., Ph. D., 111 Water St., New York, N. Y. (50).

Chambers, Frank R., 842 Broadway, New York, N. Y. (50).

Chambers, Will Grant, Professor of Psychology and Education, State Normal School, Moorhead, Minn. (52). **H**

Chambliss, Charles E., Entomologist, S. C. Exper. Sta., Clemson College, S. C. (51). **F**

Chancellor, Wm. E., Supt. of Schools, 343 Belleville Ave., Bloomfield, N. J. (52).

*Chandler, Prof. C. F., School of Mines, Columbia University, New York, N. Y. (19). 1875. **C**

*Chandler, Charles Henry, Professor of Mathematics, Ripon College, Ripon, Wis. (28). 1883. **A**

Chandler, Clarence Austin, Supt. of the Washburn Shops, Worcester Polytechnic Institute, 12 Westland St., Worcester, Mass. (52). **D**

Chandler, Elwyn Francis, Assistant Professor of Mathematics, University of North Dakota, University, N. Dak. (50). **A B**

Chandler, Richard E., Stillwater, Oklahoma. (46). **B D**

*Chandler, Seth C., 16 Craigie St., Cambridge, Mass. (29). 1882. **A**

Chaney, Prof. Lucian W., Carleton College, Northfield, Minn. (45).

Channing, Walter, M. D., Brookline, Mass. (50). **I K**

*Chanute, O., 413 E. Huron St., Chicago, Ill. (17). 1877. **D I**

Chapman, Robert Hollister, U. S. Geological Survey, Washington, D. C. (52). **E**

Charles, Fred. L., Professor of Biology, State Normal School, De Kalb, Ill. (52). **F G**

Charlton, Orlando Clarke, Professor of Biology and Geology, Kalamazoo College, Kalamazoo, Mich. (51). **E F G**

*Chase, Frederick L., Yale University Observatory, New Haven, Conn. (43). 1896. **A**

Chase, Harry Gray, Assistant Professor of Physics, Tufts College, Mass. (52). **B**

Chase, Ira Carleton, M. D., Fort Worth, Texas. (52).

Chase, John, 414-415 Kittridge Bldg., Denver, Colo. (51). **I**

Chase, R. Stuart, 53 Summer St., Haverhill, Mass. (18). **F**

*Chauvenet, Wm. M., Mining Engineer, 620 Chestnut St., St. Louis, Mo. (50). 1901. **C D**

*Cheesman, T. M., M. D., Garrison-on-Hudson, N. Y. (50) 1901. **K**
Cheney, Mrs. B. P., Sr., Wellesley, Mass. (51).

MEMBERS AND FELLOWS.

*Cheney, Lellen Sterling, 318 Bruen St., Madison, Wis. (42). 1894.

G

Cheney, Newel, Poland Center, N. Y. (52).

Cheney, Willard Colfax, Electrical Engineer, Portland, Oregon. (50). **D**

*Chester, Colby M., Captain, U. S. N., Naval Observatory, Washington, D. C. (28). 1897. **E**

Chester, Wayland Morgan, Associate Professor of Biology, Colgate University, Hamilton, N. Y. (50). **F**

*Chickering, J. W., The Portner, Washington, D. C. (22). 1877. **G I**

Chilcott, Ellery Channing, Professor of Geology, Agricultural College, Brookings, S. D. (50). **E**

*Child, Charles Manning, Instructor in Zoology, University of Chicago, Chicago, Ill. (50). 1901. **F**

*Child, Clement D., Colgate Univ., Hamilton, N. Y. (44). 1899. **B**

Childs, Arthur Edward, V. P. and Treas. the Light, Heat and Power Corporation, 131 State St., Boston, Mass. (50). **B D I**

Childs, James Edmund, Civil Eng., 300 W. 93d St., New York, N. Y. (51). **D**

Chisholm, A. Arthur, M. D., Kelseyville, Cal. (51). **K**

Chisholm, Hugh J., 813 Fifth Avenue, New York, N. Y. (50).

Chisolm, George E., 19 Liberty St., New York, N. Y. (50).

*Chittenden, Frank Hurlbut, U. S. Dept. Agriculture, Washington, D. C. (48). 1901. **F**

*Chittenden, Russell H., Director of Sheffield Scientific School, Yale University, New Haven, Conn. (50). 1901. **C F**

Chittenden, Thomas A., Instructor in Mechanical Engineering, A. and M. College, W. Raleigh, N. C. (50). **D**

*Christie, James, Chief Mech. Engineer Am. Bridge Co., Pencoed, Pa. (33). 1894. **D**

Chrystie, Wm. F., Hastings-on-Hudson, N. Y. (36).

Church, E. D., Jr., 63 Wall St., New York, N. Y. (50).

Church, Royal Tyler, Turin, N. Y. (38). **D F**

Churchill, William, Yale University, New Haven, Conn. (52). **H**

Churchill, William W., care of Westinghouse, Church, Kerr & Co., 26 Cortlandt St., New York, N. Y. (51). **D**

Churchward, Alexander, 44 Broad St., New York, N. Y. (52).

*Chute, Horatio N., Instructor in Physical Sciences, High School, Ann Arbor, Mich. (34). 1889. **A B C**

*CILLEY, FRANK H., Mass. Inst. Technology, Boston, Mass. (49). 1901. **A B D**

*Clapp, Miss Cornelia M., Mt. Holyoke College, South Hadley, Mass. (31). 1883. **F**

Clapp, Frederick Gardner, U. S. Geological Survey, Washington, D. C. (51). **E**

MEMBERS AND FELLOWS.

- Clark, Alexander S., Westfield, N. J. (33).
- Clark, Austin Hobart, 68 Perkins Hall, Cambridge, Mass. (52). **F**
- Clarke, Miss Cora H., 91 Mt. Vernon St., Boston, Mass. (47). **F G**
- Clark, Edmund, 426 Sanford Ave., Flushing, L. I., N. Y. (50).
- Clark, Ernest P., 58 Broad St., New York, N. Y. (50). 1901. **D**
- Clark, Friend Ebenezer, Dept. of Chemistry, Penna. State College, State College, Pa. (51). **C**
- *Clarke, Prof. F. W., U. S. Geol. Survey, Washington, D. C. (18). 1874. **C**
- *Clark, Gaylord Parsons, Professor of Physiology, Syracuse University, Syracuse, N. Y. (50). 1901. **F K**
- Clark, Herbert A., 346 N. 17th St., Lincoln, Neb. (50). **B C**
- Clark, Howard Walton, Field Columbian Museum, Chicago, Ill. (52). **F**
- Clark, Hubert Lyman, Ph. D., Professor of Biology, Olivet College, Olivet, Mich. (50). **F**
- Clark, James Albert, "The Cumberland," Washington, D. C. (52).
- Clark, James Frederick, M. D., Fairfield, Iowa. (50). **I K**
- *Clark, Prof. John E., 34 S. Park Terrace, Long Meadow, Mass. (17).
- Clark, John Jesse, Dean of Faculty, International Correspondence Schools, Scranton, Pa. (50). **B D**
- *Clarke, John Mason, Ph. D., Asst. State Geologist and Palæontologist, State Hall, Albany, N. Y. (45). 1897. **E**
- *Clark, John S., 110 Boylston St., Boston, Mass. (31). 1901. **B C I**
- Clark, Judson F., Assistant Professor of Forestry, New York College of Forestry, Ithaca, N. Y. (52).
- Clark, Miss May, Instructor in Physics, The Woman's College, Baltimore, Md. (52). **B**
- Clark, Oliver Durfee, 590 Halsey St., Brooklyn, N. Y. (41). **E F**
- *Clarke, Prof. Samuel Fessenden, Williams College, Williamstown, Mass. (50). 1901. **F**
- Clark, Thomas H., 34 Lancaster St., Worcester, Mass. (40).
- Clark, W. A., Ph. D., President State Normal School, Peru, Neb. (52).
- Clark, Wm. Brewster, M. D., 50 E. 31st St., New York, N. Y. (33). **C F**
- *Clark, Wm. Bullock, Ph. D., Johns Hopkins University, Baltimore, Md. (37). 1891. **E**
- Claudy, C. H., 1302 F St., N.W., Washington, D. C. (52). **A B C**
- Claxton, P. P., Univ. of Tennessee, Knoxville, Tenn. (52).
- *Claypole, Miss Agnes M., Pasadena, Cal. (46). 1899. **F**
- *Claypole, Miss Edith J., Pasadena, Cal. (46). 1899. **F**
- Cleaver, Albert N., South Bethlehem, Pa. (50). **D**
- Cleburne, William, 1219 So. Sixth St., Omaha, Neb. (51). **G**

MEMBERS AND FELLOWS.

- Clements, Frederic Edward, Ph. D., Associate Professor of Botany, Univ. of Nebraska, Lincoln, Neb. (52).
- Clements, George E., M. D., 522 Capitol Ave., Springfield, Ill. (52). **K**
- Clements, Joseph, M. D., Nutley, N. J. (52). **K**
- *Clements, Julius Morgan, Assistant Professor of Geology, University of Wisconsin, Madison, Wis. (51). 1903. **E**
- Clerc, Frank L., Hotel Metropole, Denver, Colo. (50). **C D**
- Clifton, Richard S., Assistant Secretary, A. A. A. S., Washington, D. C. (49). **F**
- Cline, Isaac M., M. D., U. S. Weather Bureau, New Orleans, La. (50). **K**
- *Cloud, John W., 974 Rookery, Chicago, Ill. (28). 1886. **A B D**
- Clough, Albert L., Box 114, Manchester, N. H. (45). **B**
- Coates, Charles E., Ph. D., Louisiana State Univ., Baton Rouge, La. (46). **C**
- Cobb, Arthur, Architect, 600 Equitable Building, Louisville, Ky. (50). **D**
- Cobb, Prof. Collier, University of North Carolina, Chapel Hill, N. C. (49).
- *Cochran, C. B., 514 South High St., West Chester, Pa. (43). 1896. **C**
- *Cockerell, T. D. A., Coburn Library, Colorado Springs, Colo. (50). 1901. **F**
- Cockran, Hon. W. Bourke, 31 Nassau St., New York, N. Y. (50).
- COE, HENRY W., M. D., "The Marquam," Portland, Oregon. (32). **F H**
- Coe, Thomas Upham, M. D., Bangor, Maine. (51). **K**
- Coffeen, Hon. H. A., Sheridan, Wyoming. (51).
- Coffin, C. A., 44 Broad St., New York, N. Y. (50).
- *Coffin, Selden J., Ph. D., Lafayette College, Easton, Pa. (22). 1874. **A I**
- Coghill, George Ellett, Ph. D., Professor of Biology, Pacific Univ., Forest Grove, Oregon. (52). **F G**
- *Cogswell, Wm. B., Syracuse, N. Y. (33). 1891. **D**
- Cohen, Mendes, Civil Engineer, 825 N. Charles St., Baltimore, Md. (50). **D**
- *Cohen, Solomon Solis, M. D., 1525 Walnut St., Philadelphia, Pa. (50). 1903. **F K**
- Coit, Joseph Howland, Saint Paul's School, Concord, N. H. (50).
- Coit, J. Milner, Ph. D., Saint Paul's School, Concord, N. H. (33). **B C E**
- Coker, Wm. Chambers, Ph. D., Associate Professor of Botany, Univ. of North Carolina, Chapel Hill, N. C. (52). **G**
- *COLBURN, RICHARD T., Elizabeth, N. J. (31). 1894. **F H I**
- Colby, Edward A., care Baker Platinum Works, Newark, N. J. (49).

MEMBERS AND FELLOWS.

- *Cole, Prof. Alfred D., Ohio State Univ., Columbus, Ohio. (39).
1891. **B C**
- Cole, George Watson, Graham Court, 1925 Seventh Ave., New York, N. Y. (52).
- Cole, Leon Jacob, 41 Wendell St., Cambridge, Mass. (52). **F**
- Cole, W. F., M. D., Waco, Texas. (51). **K**
- Coleman, Clarence, U. S. Assistant Engineer, Duluth, Minn. (51).
D H
- Coleman, Walter, Prof. of Natural History, Sam Houston Normal Institute, Huntsville, Texas. (51). **K**
- Colgate, Abner W., Morristown, N. J. (44).
- Colie, Edw. M., East Orange, N. J. (30). **E I**
- Collett, Samuel Williamson, Principal of High School, Urbana, Ohio. (50). **G**
- Collier, Arthur James, U. S. Geological Survey, Washington, D. C. (52). **E**
- Collier, Price, Tuxedo Park, N. Y. (50).
- *Collin, Prof. Alonzo, Cornell College, Mount Vernon, Iowa. (21).
1891. **B C**
- Collin, Rev. Henry P., 58 Division St., Coldwater, Mich. (37). **H**
- *Collingwood, Francis, Elizabeth, N. J. (36). 1888. **D**
- Collins, Guy N., 2818 13th St. N.W., Washington, D. C. (51). **G**
- Collins, T. Shields, M. D., Globe, Arizona. (51). **K**
- Colton, Geo. H., Professor of Natural Science, Hiram College, Hiram, Ohio. (51). **B E**
- *Colvin, Verplanck, Supt. N. Y. State Adirondack Survey, Albany, N. Y. (28). 1880. **E**
- *Comstock, Prof. Charles Worthington, Civil and Mining Engineer, 76 Grant Ave., Denver, Colo. (47). 1901. **A D**
- Comstock, Daniel F., 102 Huntington Ave., Boston, Mass. (52). **B**
- *Comstock, Prof. Geo. C., Washburn Observatory, University of Wisconsin, Madison, Wis. (34). 1887. **A**
- *COMSTOCK, PROF. THEO. B., Mining and Metallurgical Engineer, 534 Stinson Bldg., Los Angeles, Cal. (24). 1877. **B D E**
- Comstock, Dr. T. Griswold, 3401 Washington Ave., St. Louis, Mo. (29). **F H**
- Conant, Charles A., Treasurer Morton Trust Co., 38 Nassau St., New York, N. Y. (52). **I**
- Conant, Miss E. Ida, 42 W. 48th St., New York, N. Y. (33). **F H I**
- *Conant, Prof. Levi L., Polytechnic Institute, Worcester, Mass. (39). 1892. **A**
- Conarro, Thomas H., M. D., Lecturer on Biology, Hahnemann Medical College of Philadelphia, Philadelphia, Pa. (50). **F K**
- *Conklin, Edwin Grant, Professor of Biology, University of Pennsylvania, Philadelphia, Pa. (50). 1901. **F**

MEMBERS AND FELLOWS.

- Connaway, J. W., Professor Veterinary Science, Missouri State Univ., Columbia, Mo. (52). **F**
- Connelley, C. B., Supervisor Industrial Schools, Allegheny, Pa. (49). **I**
- Connor, Leartus, M. D., President of Michigan State Medical Society, 103 Cass St., Detroit, Mich. (51). **K**
- Conradson, Pontus H., Chief Chemist, Galena-Signal Oil Co., Franklin, Pa. (51). **B C D**
- Constant, Frank H., Professor of Structural Engineering, University of Minnesota, Minneapolis, Minn. (51). **D**
- Converse, Vernon G., Box 154, Niagara Falls, N. Y. (50). **D**
- Conway, George M., Mechanical Engineer, 10 Belvedere, Milwaukee, Wis. (51). **D**
- Cook, Dr. Charles D., 162 Remsen St., Brooklyn, N. Y. (25).
- Cooke, George Willis, Park St., Wakefield Park, Wakefield, Mass. (47). **H I**
- Cook, James B., Randolph Building, Memphis, Tenn. (50).
- *Cook, Melville T., De Pauw University, Greencastle, Ind. (45). 1902. **G**
- *Cook, Orator F., U. S. Dept. of Agriculture, Washington, D. C. (40). 1892. **G**
- *Cook, Samuel R., Case School, Cleveland, Ohio. (50). 1903. **B C**
- *Cooley, Grace E., Ph. D., Wellesley College, Wellesley, Mass. (47). 1900. **G I**
- *Cooley, Prof. LeRoy C., Vassar College, Poughkeepsie, N. Y. (19). 1880. **B C**
- *Cooley, Prof. Mortimer E., University of Michigan, Ann Arbor, Mich. (33). 1885. **D**
- Cooley, Robert A., Zoologist and Entomologist, Montana Agr'l College and Experiment Station, Bozeman, Montana. (50). **F**
- Coombs, Zelotes Wood, Professor of Modern Languages, Worcester Polytechnic Institute, Worcester, Mass. (52). **I**
- Cooper, Hon. Edward, 12 Washington Square, N., New York, N. Y. (49).
- Cooper, Hermon Charles, Ph. D., Instructor in Chemistry, Syracuse University, Syracuse, N. Y. (51). **C**
- Cooper, James Campbell, Room 5, Veale Block, Topeka, Kansas. (50). **C E**
- *Copeland, Edwin Bingham, 653 E. 57th St., Chicago, Ill. (45). 1901. **G**
- *Coplin, W. M. L., M. D., Professor of Pathology and Bacteriology, Jefferson Medical College, Philadelphia, Pa. (51). 1903. **K**
- *Coquillett, Daniel William, U. S. National Museum, Washington, D. C. (43). 1902. **F**
- *Corbett, L. C., U. S. Dept. Agriculture, Washington, D. C. (48). 1901. **G**

MEMBERS AND FELLOWS.

- Cornelison, Robert W., Sc.D., Manufacturing Chemist, Bloomfield, N. J. (51). **C**
- Cornish, George A., Lindsay, Ont., Canada. (52). **F**
- Cornman, Oliver P., Ph. D., 2252 N. 20th St., Philadelphia, Pa. (46). **H**
- *Corthell, Elmer L., 1 Nassau St., New York, N. Y. (34). 1886. **D E I**
- Corwin, Clifford Egbert, Teacher of Science, Marietta High School Marietta, Ohio. (50). **C**
- Coster, William H., Chemist and Biologist to Bureau of Water, Department of Public Works, Pittsburg, Pa. (51). **C**
- *Coulter, Prof. John M., University of Chicago, Chicago, Ill., (32). 1884. **G**
- Coulter, Samuel Monds, The Shaw School of Botany, St. Louis. Mo. (52). **G**
- Courtis, William Munroe, 412 Hammond Bldg., Detroit, Mich. (46). **E C G**
- Coutant, Richard Bonnet, M. D., Tarrytown, N. Y. (51). **K**
- *Coville, Frederick V., U. S. Dept. Agriculture, Washington, D. C. (35). 1890. **G**
- *Cowles, Alfred H., 656 Prospect St., Cleveland, Ohio. (37). 1897. **B C**
- *Cowles, Edward, M. D., Medical Supt. McLean Hospital, Waverly, Mass. (51). 1903. **K**
- Cowles, Miss Louise F., Mt. Holyoke College, South Hadley, Mass. (47). **E**
- Cox, Abraham Beekman, Civil Engineer, Cherry Valley, N. Y. (50). **D**
- *Cox, Charles F., Grand Central Depot, New York, N. Y. (43). 1900. **F G**
- Cox, Edmund Otis, C. E., Manhattan Railway Co., 1878 Seventh Ave., New York, N. Y. (51). **D**
- Cox, John, Professor of Experimental Physics, McGill University. Montreal, Can. (51). **B**
- Cox, Ulysses O., Professor of Biology, State Normal School, Man-
kota, Minn. (50). **F**
- Coxe, Eckley B., Jr., U. S. Weather Bureau Observer, Drifton, Pa. (51).
- Coyle, Rev. John S., S. J., St. Joseph's College, 17th and Stiles Sts., Philadelphia, Pa. (48). **B**
- *Crafts, James Mason, Mass. Inst. Technology, Boston, Mass. (47). 1898. **C**
- *Cragin, Francis Whittemore, Ph. D., 1715 Wood Ave., Colorado Springs, Colo. (29). 1890. **E F H**
- Craig, Alexander Righter, M. D., 232 Cherry Street, Columbia, Pa. (51). **K**

MEMBERS AND FELLOWS.

- Craig, John, College of Agriculture, Cornell University, Ithaca, N. Y. (41). **G**
- Craig, Wallace, Zoological Laboratory, Univ. of Chicago, Chicago, Ill. (50). **F**
- CRAM, ROYS JONES, 26 Hancock Ave., West, Detroit, Mich. (51).
- *Crampton, Chas. A., M. D., Office of Internal Revenue Commissioner, U. S. Treasury Dept., Washington, D. C. (36). 1887. **C**
- *Crampton, Henry E., Adjunct Professor of Zoology, Barnard College, Columbia University, New York, N. Y. (51). 1903. **F**
- *Crandall, Charles S., 1108 Oregon St., Urbana, Ill. (40). 1894.
- Crandall, Francis Asbury, Librarian of Public Documents, 2219 15th St., N.W., Washington, D. C. (50). **I**
- Crane, James M., Board of Education, Newburgh, N. Y. (50). **I**
- Crane, Walter, Supt. Carnegie Free Library, Braddock, Pa. (47). **G**
- Cranston, Robert E., E. M., Fair Oaks, Cal. (50). **D E**
- Cratty, R. I., Armstrong, Iowa. (52). **G**
- Crawford, David Francis, Genl. Supt. Motive Power, Penna. Lines West of Pittsburg, Union Station, Pittsburg, Pa. (50). **D**
- Crawford, John, Leon, Nicaragua, Central America. (40). **E H**
- *Crawford, Morris B., Middletown, Conn. (30). 1889. **B**
- *Crawley, Edwin S., Ph. D., University of Pennsylvania, Philadelphia, Pa. (45). 1900. **A**
- Crawley, Howard, Wyncote, Pa. (51). **F**
- Crehore, Albert Cushing, 48 Lincoln Terrace, Yonkers, N. Y. (50). **D E**
- Crew, Henry, Professor of Physics, Northwestern University, Evanston, Ill. (52). **B**
- *Crile, George W., M. D., 169 Kensington St., Cleveland, Ohio. (51). 1903. **K**
- Crockard, Frank Hearne, E. M., C. E., Asst. Mgr. Riverside Dept. National Tube Co., Lock Box 34, Wheeling, W. Va. (50). **D**
- *Crocker, Francis B., Professor of Electrical Engineering, Columbia University, New York, N. Y. (50). 1901. **B D**
- *Crockett, Prof. Charles W., Rensselaer Polytechnic Institute, Troy, N. Y. (39). 1894. **A D**
- *Crook, Alja Robinson, Ph. D., 1914 Sheridan Road, Evanston, Ill. (47). 1902. **E**
- Crosby, Oscar Terry, Cosmos Club, Washington, D. C. (52). **C E I**
- Crosby, William Edward, 1603 Amsterdam Ave., New York, N. Y. (52).
- *Crosby, Prof. W. O., Mass. Institute Technology, Boston, Mass. (47). 1900. **E**
- *Cross, Prof. Charles R., Mass. Inst. Technology, Boston, Mass. (29). 1880. **B**

MEMBERS AND FELLOWS.

- Crouse, Hugh Woodward, M. D., Victoria, Texas. (50). **F K**
CROWELL, A. F., Woods Holl, Mass. (30). **C**
 *Crowell, John Franklin, Bur. of Statistics, Washington, D. C. (50).
 1901. **I**
 Crozier, William, Brigadier-General and Chief of Ordnance,
 U. S. A., War Department, Washington, D. C. (50). **D**
 Crump, Col. M. H., Bowling Green, Ky. (29). **E**
 Crunden, Frederick Morgan, Librarian Public Library, 3635
 Laclede Ave., St. Louis, Mo. (52). **I**
 Cryer, Matthew H., M. D., D. D. S., 1420 Chestnut St., Philadel-
 phia, Pa. (50). **F K**
 *Culin, Stewart, Brooklyn Institute of Arts and Sciences, Brooklyn,
 N. Y. (33). 1890. **H**
 *Cumings, Edgar R., Bloomington, Ind. (48). 1901. **E**
 *Cummings, Miss Clara E., Wellesley College, Wellesley, Mass.
 (47). 1899. **G**
 Cummins, George Wyckoff, M. D., Belvidere, N. J. (50). **G K**
 Cunningham, Francis A., 1613 Wallace St., Philadelphia, Pa. (33).
B D E
 *Cunningham, Prof. Susan J., Swarthmore College, Swarthmore,
 Pa. (38). 1901. **A**
 Curran, Ulysses T., Probate Judge, Erie Co., Sandusky, Ohio.
 (52). **I**
 Currie, C. A., M. D., P. O. Box 1606, Philadelphia, Pa. (48). **F**
 *Curtis, Carlton C., Columbia University, New York, N. Y. (51).
 1903. **G**
 Curtis, Charles B., 9 East 54th St., New York, N. Y. (50).
 Curtis, George Carroll, 64 Crawford St., Boston, Mass. (52). **E**
 Curtis, G. Lenox, M. D., 7 West 58th St., New York, N. Y. (51).
 [Curtis, George W., Mgr. Collier County Mill and Elevator Co., Mc-
 Kinney, Texas. (50).
 Curtis, H. Holbrook, M. D., 118 Madison Ave., New York, N. Y.
 (51). **K**
 Curtis, Mattoon M., Prof. of Philosophy, Western Reserve Uni-
 versity, Cleveland, Ohio. (50). **H I**
 Curtiss, Richard Sydney, Asst. Prof. of Chemistry, Union College,
 Schenectady, N. Y. (52). **C**
 *Curtis, William E., Post Building, Washington, D. C. (40). 1903. **H I**
 Cushing, Harvey, M. D., 3 West Franklin St., Baltimore, Md.
 (52). **K**
 *Cushing, Henry Platt, Adelbert College, Cleveland, Ohio. (33).
 1888. **E**
 Cushing, John J., 1001 Union Trust Bldg., Cincinnati, Ohio. (50). **D**
 *Cushman, Allerton, Ph. D., Bureau of Chemistry, U. S. Dept.
 Agriculture, Washington, D. C. (50). 1901. **C**

MEMBERS AND FELLOWS.

- *Cushny, Arthur R., Professor of Materia Medica and Therapeutics, Univ. of Michigan, Ann Arbor, Mich. (50). 1901. **K**
- Cutler, Coiman Ward, M. D., 36 East 33d St., New York, N. Y. (50). **K**
- Cutter, Ephraim, M. D., 120 Broadway, New York, N. Y. (51). **K**
- Cutter, Irving S., Box 732, Lincoln, Neb. (50). **F G**
- *Dabney, Charles W., Ph. D., President University of Tennessee, Knoxville, Tenn. (47). 1901. **C**
- Daggette, Alvin S., M. D., 400 South Craig St., Pittsburg, Pa. (50). **F K**
- Dahlgren, Ulric, Ph. D., Princeton University, Princeton, N. J. (51). **F**
- Daland, Rev. William Clifton, D. D., President of Milton College, Milton, Wis. (52). **I**
- Dale, J. Y., M. D., P. O. Box 14, Lemont, Pa. (51). **K**
- *Dall, William Healey, Smithsonian Institution, Washington, D. C. (18). 1874. **F H**
- Dalrymple, W. H., Prof. Vet. Science, La. State Univ. and A. & M. College, Baton Rouge, La. (50). **F K**
- *Dana, Dr. Charles L., 50 W. 46th St., New York, N. Y. (46). 1889. **H**
- *Dana, Edward Salisbury, New Haven, Conn. (23). 1875. **B E**
- Daniel, John, Professor of Physics, Vanderbilt Univ., Nashville, Tenn. (50). **B**
- Danielson, A. H., Agricultural College, Fort Collins, Colo. (50). **G**
- *Darton, Nelson H., U. S. Geol. Survey, Washington, D. C. (37). 1893.
- Daugherty, Rev. Jerome, S. J., President of Georgetown Univ., Washington, D. C. (52).
- d'Auria, Luigi, M. E., 972 Drexel Bldg., Philadelphia, Pa. (51). **A D**
- *Davenport, Charles Benedict, Ph. D., Univ. of Chicago, Chicago, Ill. (46). 1898. **F**
- Davenport, Eugene, Dean of the College of Agriculture, University of Illinois, Champaign, Ill. (39).
- Davenport, Francis Henry, M. D., 419 Boylston St., Boston, Mass. (50). **K**
- *Davidson, George, 2221 Washington St., San Francisco, Cal. (29). 1881. **A B D**
- Davidson, R. J., Agric. Exper. Station, Blacksburg, Va. (40). **C**
- Davies, William G., 22 E. 45th St., New York, N. Y. (49).
- Davis, Abial B., 129 East Lincoln Ave., Mt. Vernon, N. Y. (44). **A**
- DAVIS, ANDREW McFARLAND, 10 Appleton St., Cambridge, Mass. (35). **H**
- Davis, Bergen, Columbia University, New York, N. Y. (49). **B**
- *Davis, Bradley Moore, Dept. of Botany, Univ. of Chicago, Chicago, Ill. (45). 1897. **G**

MEMBERS AND FELLOWS.

- Davis, Charles F., Fort Collins, Colo. (50). **C**
 Davis, Charles Gilbert, M. D., 31 Washington St., Chicago, Ill. (51). **K**
 *Davis, C. H., Commander U. S. N., Navy Dept., Washington, D. C. (40). 1896.
 Davis, Edward E., 47 W. Main St., Norwich, N. Y. (50).
 Davis, George S., P. O. Box 724, Detroit, Mich. (50).
 *Davis, Herman S., Ph. D., Director of International Latitude Station, Gaithersburg, Md. (50). 1901. **A**
 *Davis, J. J., M. D., 1119 College Ave., Racine, Wis. (31). 1899. **F G**
 Davis, John J., Attorney at law, Clarksburg, W. Va. (50). **I**
 Davis, Kary Cadmus, Ph. D., Menomonee, Wis. (50). **G**
 *Davis, Nathan Smith, M. D., LL. D., 65 Randolph St., Chicago, Ill. (51). 1903. **K**
 Davis, N. S., Jr., 291 Huron St., Chicago, Ill. (50). **F G**
 *Davis, Wm. Harper, Asst. in Psychology, Columbia Univ., New York, N. Y. (50). 1903. **H I**
 *Davis, Prof. Wm. Morris, Cambridge, Mass. (33). 1885. **B E**
 Davis, Wm. Walley, Virginia Iron, Coal and Coke Co., Roanoke, Va. (50). **C**
 Davison, Alvin, Ph. D., Lafayette College, Easton, Pa. (49).
 Davison, Lt. Gregory C., U. S. N., care Navy Department, Washington, D. C. (52). **D**
 Davison, John M., 340 Oxford St., Rochester, N. Y. (38). **C**
 Daviss, Edward Paxton, M. D., 205-6 Binz Building, Houston, Texas, (51). **K**
 *DAVY, JOSEPH BURTT, State Agrostologist and Botanist, Department of Agriculture, Pretoria, Transvaal. (51). 1903. **G**
 *Dawson, Percy Millard, M. D., Instructor in Physiology, Johns Hopkins Medical School, Baltimore, Md. (50). 1903. **K**
 *DAY, WILLIAM SCOFIELD, Ph. D., 337 W. 87th St., New York, N. Y. (50). 1901. **B**
 Dean, Edward B., Hotel Gordon, Washington, D. C. (52).
 Dean, Seth, C. E., Surveyor of Mills County, Glenwood, Iowa. (34). **D**
 Dean, Wm. H., 167 West River St., Wilkes-Barre, Pa. (50). **C**
 Deans, John Sterling, Chief Engineer, Phoenix Bridge Co. Phoenixville, Pa. (51). **D**
 Dearborn, George Van Ness, Ph. D., Professor of Physiology, Tufts Medical and Dental Schools, Boston, Mass. (52). **K**
 de Arozarena, Rafael M., Consulting Engineer, 2da Calle de las Estaciones, Esquina de Encino, City of Mexico, Mexico. (51). **D**
 de Benneville, James S., University Club, 1510 Walnut St., Philadelphia, Pa. (46). **C**

MEMBERS AND FELLOWS.

de Coppet, Henry, 22 West 17th St., New York, N. Y. (49).
 Deens, Miss Anna M., 216 North Ave., W., Allegheny, Pa. (50).

F G

- de Forest, Robert W., 30 Broad St., New York, N. Y. (49).
 de Funiak, Frederick, Consulting Engineer, 204 E. Chestnut St.,
 Louisville, Ky. (51). **D**
 De Garmo, William Burton, M. D., Professor of Surgery, N. Y.
 Post Graduate Medical School and Hospital, 56 W. 36th St.,
 New York, N. Y. (51). **K**
 *Deghuée, Joseph A., Ph. D., 247 Harrison St., Brooklyn, N. Y.
 (40). 1900. **C**
 Deimel, Richard F., 209 West 97th St., New York, N. Y. (52). **A**
 *Delabarre, E. B., Ph. D., 9 Arlington Ave., Providence, R. I. (49).
 1901. **H I**
 Delafield, Maturin L., Jr., Fieldston, Riverdale, New York, N. Y.
 (43). **G**
 Delafond, E., Ingenieur Chimiste, P. O. Box 2290, City of Mexico,
 Mexico. (50). **C**
 DE LANDERO, CARLOS F., Asst. Director Pachuca and Real del
 Monte Mining Co., Pachuca, Mexico. (36). **B C**
 Delano, Frederic A., Supt. of Motive Power, C. B. and Q. Railroad,
 209 Adams St., Chicago, Ill. (50). **D**
 Delany, Patrick Bernard, E. E., Inventor, South Orange, N. J.
 (50). **D**
 Dellenbaugh, Frederick S., Century Club, 7 West 43d St., New
 York, N. Y. (51). **H**
 Dempster, Alexander, Stanton and Euclid Aves., Pittsburg, Pa.
 (50). **D**
 Dennett, William S., 8 East 49th St., New York, N. Y. (52). **A K**
 *Dennis, David Worth, Professor of Biology, Earlham College,
 Richmond, Ind. (50). 1901. **F**
 *Dennis, Louis Munroe, Cornell University, Ithaca, N. Y. (43).
 1895. **C**
 de Peyster, Johnston Livingston, Tivoli, New York. (52).
 de Raasloff, Harold, Civil Engineer, 18 Burling Slip, New York,
 N. Y. (51). **D**
 Derby, George McClellan, Major, Corps of Engineers, U. S. A.,
 Louisville, Ky. (50). **D**
 *Derby, Orville A., Commissao Geologica, Sao Paulo, Brazil, South
 America. (39). 1890. **E**
 *de Schweinitz, E. A., M. D., U. S. Dept. Agriculture, Washing-
 ton, D. C. (36). 1889. **C**
 Detmers, Fredericka, 1315 Neil Ave., Columbus, Ohio. (48). **G**
 Devereux, W. B., 99 John St., New York, N. Y. (50).
 *Dewey, Lyster H., U. S. Dept. Agriculture, Washington, D. C.
 (40). 1899. **F G**

MEMBERS AND FELLOWS.

- Dexter, E. G., Ph. D., Professor of Education and Psychology, University of Illinois, Urbana, Ill. (52). **K**
- *Dexter, Franklin, M. D., Associate Professor of Anatomy, Harvard Medical School, Boston, Mass. (50). 1901. **K**
- Dickerson, E. N., 141 Broadway, New York, N. Y. (49).
- Dickinson, Gordon K., M. D., 278 Montgomery St., Jersey City, N. J. (51). **K**
- Diemer, Hugo, Associate Professor of Mechanical Engineering, Univ. of Kansas, Lawrence, Kans. (49).
- *Diller, J. S., U. S. Geological Survey, Washington, D. C. (52). 1903. **E**
- *Dimmock, George, Box 1597, Springfield, Mass. (22). 1874. **F**
- Dimock, Mrs. Henry F., 25 East 60th St., New York, N. Y. (50).
- Dimon, Miss Abigail Camp, 367 Genesee St., Utica, N. Y. (50). **F K**
- Dinkey, Alva C., General Supt. Homestead Steel Works, Munhall, Pa. (50). **D**
- Disbrow, William S., M. D., 151 Orchard St., Newark, N. J. (51). **K**
- Dixon, Brandt B., President of Newcomb College, New Orleans, La. (52). **K**
- *Dixon, Roland B., Peabody Museum, Cambridge, Mass. (46). 1901. **H**
- Dixon, Samuel Gibson, M. D., Acad. Nat. Sciences, 1900 Race St., Philadelphia, Pa. (50). **F K**
- Dixson, Prof. Zella Allen, Librarian University of Chicago, Chicago, Ill. (52). **I**
- *Dock, George, M. D., 1014 Cornwell Place, Ann Arbor, Mich. (51). 1903. **K**
- *Dodge, Charles Richards, 1336 Vermont Ave., N.W., Washington, D. C. (22). 1874.
- *Dodge, Charles Wright, Univ. of Rochester, Rochester, N. Y. (39). 1898. **F**
- Dodge, D. Stuart, 225 Madison Ave., New York, N. Y. (49).
- Dodge, Philip T., Tribune Building, New York, N. Y. (44). **B D**
- *Dodge, Richard E., Teachers' College, Columbia Univ., New York, N. Y. (49). 1901. **E I**
- Dodman, Alfred C., Jr., 235 W. 108th St., New York, N. Y. (50).
- Doherty, Henry L., 40 Wall St., New York, N. Y. (48). **B C D**
- Doherty, Manning William, Associate Professor of Biology, Ontario Agricultural College, Guelph, Canada. (50). **F G**
- *Dolbear, Prof. A. Emerson, Tufts College, Mass. (20). 1880. **B**
- Dole, Rev. Charles Fletcher, Jamaica Plain, Mass. (50). **I**
- Domenech, Manuel V., Civil Engineer and Architect, Lock Box 220, Ponce, Porto Rico. (50). **D I**
- Donovan, Cornelius, Assistant Engineer, U. S. Engineer Office, Custom House, New Orleans, La. (51). **D**

MEMBERS AND FELLOWS.

- *Doolittle, Prof. C. L., Upper Darby, Pa. (25). 1885. **A**
- *Dorsey, George A., Ph. D., Field Columbian Museum, Chicago, Ill. (39). 1892. **H**
Dorsey, Herbert Grove, Professor of Physics, Fla. Agr. College, Lake City, Fla. (51). **B**
- *Dorsey, N. Ernest, Ph. D., Annapolis Junction, Md. (46). 1898. **B**
Doty, Paul, 230 Woodward Ave., Detroit, Mich. (43). **D**
Doubt, Thomas Eaton, 693 East 57th St., Chicago, Ill. (48). **B**
Doughty, Mrs. Allā, Milford, Pa. (49).
DOUGHTY, JOHN W., 165 Johnston St., Newburgh, N. Y. (19). **E**
Douglas, Mrs. George William, Tuxedo Park, N. Y. (49).
Douglas, James, 99 John St., New York, N. Y. (49).
Douglas, Orlando B., 20 Pleasant St., Concord, N. H. (49).
Dow, Allan Wade, District Bldg., Washington, D. C. (52). **C D**
Dow, Herbert H., Midland, Mich. (47). **C**
Dowell, Philip, Ph. D., High School, Port Richmond, N. Y. (50). **F**
Downing, Elliott Rowland, Ph. D., Professor of Biology, Northern State Normal School, Marquette, Mich. (51). **F**
Downs, Edgar Selah, 704 Trenton Ave., Wilksburg Station, Pittsburg, Pa. (50). **B**
Downs, Norton, M. D., 215 West Walnut Lane, Germantown, Philadelphia, Pa. (52). **K**
Dozier, Melville, Professor of Mathematics and Physical Sciences, State Normal School, Los Angeles, Cal. (53). **A B**
- *DRAPER, DANIEL, Ph. D., N. Y. Meteorological Observatory, Central Park, 64th St., Fifth Ave., New York, N. Y. (29). 1881. **A B D F**
Draper, Mrs. Henry, 271 Madison Ave., New York, N. Y. (49).
Drayer, H. C., Manual Training School, Washington University, St. Louis, Mo. (51).
Drescher, Willibald A. E., P. O. Drawer 1033, Rochester, N. Y. (41). **F**
Dreyfus, Dr. William, 162 East 95th St., New York, N. Y. (52). **C**
Droop, Edward F., 1455 Bacon St., Washington, D. C. (52). **I**
- *DROPPERS, GARRETT, President of the State University, Vermillion, S. Dak. (50). 1901. **I**
- *Drown, Prof. Thos. M., Lehigh University, South Bethlehem, Pa. (29). 1881. **C**
Drummond, Isaac Wyman, Ph. D., 436 W. 22d St., New York, N. Y. (36).
*Dryer, Charles Redway, Professor of Geography, Indiana State Normal School, Terre Haute, Ind. (50). 1903. **E**
Duane, Russell, 911 Pine St., Philadelphia, Pa. (50). **I**
*Duane, William, Ph. D., Professor of Physics, State University, Boulder, Colo. (50). 1901. **B**

MEMBERS AND FELLOWS.

- *Du Bois, Prof. Aug. J., New Haven, Conn. (30). 1882. **A B D**
 Du Bois, Howard Weidner, 4526 Regent St., Philadelphia, Pa. (47). **A**
- *Du Bois, Patterson, 401 So. 40th St., Philadelphia, Pa. (33). 1887. **C H I**
 DuBois, Wm. E. B., Professor of Economics and History, Atlanta University, Atlanta, Ga. (50). **I**
 Du Bose, F. G., M. D., 915 Alabama St., Selma, Ala. (51). **K**
 Dudgeon, H. R., M. D., Demonstrator of Surgery, School of Medicine, University of Texas, Galveston, Texas. (50). **F K**
- *Dudley, Charles B., Drawer 156, Altoona, Pa. (23). 1882. **B C D**
 Dudley, S. W., 333 York St., New Haven, Conn. (50). **A D**
- *DUDLEY, WM. L., Vanderbilt University, Nashville, Tenn. (28). 1881. **C**
- *Dudley, Prof. Wm. R., Dept. of Systematic Botany, Stanford University, Cal. (29). 1883. **G**
 Duerden, J. E., Ph. D., Professor of Biology, University of North Carolina, Chapel Hill, N. C. (52). **F**
- *Duggar, Benjamin Minge, Professor of Botany, Univ. of Missouri, Columbia, Mo. (45). 1900. **G**
 Duke Frank Williamson, Professor of Mathematics, Hollins Institute, Hollins, Va. (50). **A**
 Dulles, Charles W., M. D., 4101 Walnut St., Philadelphia, Pa. (51). **K**
 Dumaresq, Philip K., Sears Bldg., Boston, Mass. (50).
- *Dumble, E. T., Consulting Geologist, Southern Pacific Co., 1708 Prairie Ave., Houston, Tex. (37). 1891. **E**
 Duncan, Fred. N., Professor of Biology, Emory College, Oxford, Ga. (50). **C**
- *Duncan, George Martin, Professor of Philosophy, Yale University, New Haven, Conn. (50). 1902. **H**
 Duncanson, Henry Bruce, Professor of Biology, State Normal School, Peru, Neb. (50). **F**
 Duncklee, John B., Civil Engineer, 35 Fairview Ave., South Orange, N. J. (51). **D**
- *Dunham, Edward K., M. D., Professor of Pathology, Carnegie Laboratory, 338 East 26th St., New York, N. Y. (30). 1890.
 Dunham, Henry Bristol, M. D., State Sanatorium, Rutland, Mass. (51). **K**
 Dunham, Kennon, M. D., Auburn Ave. and McMillan St., Cincinnati, Ohio. (51). **K**
- Dunlevy, Robert Baldwin, Prof. Kansas State Normal College, Winfield, Kansas. (50). **C E**
- Dunn, Gano Sillick, Electrical Engineer, Crocker-Wheeler Company, Ampere, N. J. (50). **D**

MEMBERS AND FELLOWS.

- Dunn, Ira J., M. D., 810 Peach St., Erie, Pa. (51). **K**
- Dunning, Lehman H., M. D., 224 N. Meridian St., Indianapolis, Ind. (51). **K**
- *Dunnington, Prof. F. P., University Station, Charlottesville, Va. (26). 1880. **C**
- *Dunstan, A. St. C., Professor of Electrical Engineering, Polytechnic Institute, Auburn, Ala. (50). 1901. **B D**
- *DuPont, Francis G., Montchanin, Del. (33). 1896. **A B D**
- *Durand, Elias J., D. S., 402 Eddy St., Ithaca, N. Y. (41). 1899. **G**
- Durand, John S., 146 Broadway, New York, N. Y. (49).
- *Durand, W. F., Ph. D., Cornell University, Ithaca, N. Y. (37). 1890. **B**
- *Durfee, William P., Ph. D., 639 Main St., Geneva, N. Y. (46). 1899. **A**
- Dutton, Charles Frederic, Jr., 626 Franklin Ave., Cleveland, Ohio. (47).
- Duval, Edmund P. R., 32 Irving St., Cambridge, Mass. (50).
- Duval, Trumbull Gillette, Ph. D., Professor of Psychology and Philosophy, Ohio Wesleyan University, Delaware, Ohio. (52). **H**
- Duvel, Joseph W. T., 2818 13th St., N.W., Washington, D. C. (48). **G**
- Dwight, Dr. Jonathan, Jr., 2 E. 34th St., New York, N. Y. (49).
- *Dwight, Thomas, M. D., Harvard Medical School, Boston, Mass. (47). 1898. **H K**
- *Dwight, Prof. William B., Vassar College, Poughkeepsie, N. Y. (30). 1882. **E F**
- *Dyar, Harrison G., Ph. D., U. S. National Museum, Washington, D. C. (43). 1898.
- Dyche, Lewis Lindsay, Professor of Systematic Zoology and Taxidermist, University of Kansas, Lawrence, Kans. (51). **F**
- Dysterud, E., Electrical Engineer, Monterey, Mexico. (50). **D**
- Eagleson, James B., M. D., 512 Burke Bldg., Seattle, Wash. (51). **K**
- *Earle, F. S., N. Y. Botanical Garden, Bronx Park, New York. (39). 1896. **G**
- Earll, Charles Isaac, M. E., 76 William St., New York, N. Y. (52). **D**
- *Eastman, Charles Rochester, Museum Comp. Zoology, Cambridge, Mass. (41). 1896. **E F**
- *Eastman, Prof. J. R., Andover, N. H. (26). 1879. **A**
- Easton, Christopher, Deputy Superintendent, Metropolitan Hospital, Blackwell's Island, New York, N. Y. (52). **I K**
- *Eastwood, Miss Alice, Curator of Herbarium, California Academy of Sciences, San Francisco, Cal. (50). 1901. **G**

MEMBERS AND FELLOWS.

- Eaton, Elon Howard, 209 Cutler Building, Rochester, N. Y. (52). **F**
- Eccles, David Charles, Northwestern Univ., Evanston, Ill. (50). **C**
- *Eccles, Robert G., M. D., 191 Dean St., Brooklyn, N. Y. (31). 1894. **C F**
- Eckel, Edwin C., Assistant Geologist, U. S. Geological Survey, Washington, D. C. (51). **E**
- Eckles, C. H., Columbia, Mo. (50). **F**
- *Eddy, Prof. H. T., Univ. of Minnesota, Minneapolis, Minn. (24). 1875. **A B D**
- Edes, Robert Thaxter, M. D., 15 Greenough Ave., Jamaica Plain, Mass. (50). **F H K**
- Edgar, Clinton G., 72 Jefferson Ave., Detroit, Mich. (46).
- Edmands, Isaac Russell, Supt. Union Carbide Co., Sault Ste. Marie, Mich. (50). **C D**
- Edmonds, Richard H., President and Editor, "Manufacturers' Record," Baltimore, Md. (50). **D**
- Edwards, Arthur M., M. D., F. L. S., F. R. M. S., R. A. S., 333 Belleville Ave., Newark, N. J. (52). **K**
- *Edwards, Prof. Charles Lincoln, Trinity College, Hartford, Conn. (49). 1900. **F**
- Edwards, Col. Clarence R., U. S. A., Chief of the Bureau of Insular Affairs, War Department, Washington, D. C. (52). **I**
- Edwards, Prof. John W., Iowa Wesleyan University, Mt. Pleasant Iowa. (48).
- Ehrenfeld, Frederick, Ph. D., Instructor in Geology, University of Pennsylvania, Philadelphia, Pa. (50). **E**
- Ehrhorn, Edward Macfarlane, County Entomologist, Santa Clara Co., Mountain View, Cal. (50). **F**
- *Eichelberger, William Snyder, Ph. D., Nautical Almanac Office, U. S. Naval Observatory, Washington, D. C. (41). 1896. **A**
- *Eiesland, John, Ph. D., Professor of Mathematics, Thiel College, Greenville, Pa. (50). 1903. **A**
- *Eigenmann, Carl H., Ph. D., Indiana University, Bloomington, Ind. (48). 1899. **F**
- Eilers, Anton F., Mining Engineer and Metallurgist, 751 St. Marks Ave., Brooklyn, N. Y. (50). **D E**
- *Eimbeck, William, U. S. C. and G. Survey, Washington, D. C. (17). 1874. **A B D**
- Eimer, August, 220 East 19th St., New York, N. Y. (50).
- Elder, E. Waite, Instructor in Physics, High School, Denver, Colo. (50). **B**
- Elftman, Arthur Hugo, Ph. D., Mining Engineer, 706 Globe Building, Minneapolis, Minn. (50). **E**
- *Elkin, William L., Yale University Observatory, New Haven, Conn. (33). 1885. **A**

MEMBERS AND FELLOWS.

- Elliot, George T., M. D., 36 East 35th St., New York, N. Y. (50). **F K**
- Ellis, Alexander Casswell, Adjunct Professor Education, Univ. of Texas, Austin, Tex. (52). **I K**
- Ellis, Frederick W., M. D., Monson, Mass. (47). **B H**
- Ellis, H. Bert, M. D., 243-246 Bradbury Block, Los Angeles, Cal. (50). **K**
- Ellis, Robert W., Hurley, S. D. (50). **E**
- *Elrod, Morton John, Professor of Biology, University of Montana, Missoula, Mont. (50). 1901. **F**
- Ely, Charles Russell, Professor of Natural Science, Gallaudet College, 5 Kendall Green, Washington, D. C. (52). **C**
- Ely, Robert Erskine, Executive Director, League for Political Education, 23 West 44th St., New York, N. Y. (52). **I**
- Ely, Sumner Boyer, Chief Engineer American Sheet Steel Co., Vandergrift Building, Pittsburg, Pa. (50). **D**
- *Ely, Theo. N., Chief of Motive Power, Pennsylvania R.R., Broad St. Station, Philadelphia, Pa. (29). 1886. **D**
- *Emerson, Prof. Benjamin K., Box 203, Amherst, Mass. (19). 1877. **E F**
- *EMERSON, C. F., Box 499, Hanover, N. H. (22). 1874. **A B**
- *Emery, Albert H., Stamford, Conn. (29). 1884. **B D**
- Emery, Albert Hamilton, Jr., 312 Main St., Stamford, Conn. (47). **D**
- Emmertson, Frederic Augustus, 9 Bratenahl Bldg., Cleveland, Ohio. (50). **I**
- Emmons, Arthur B., Newport, R. I. (50). **E**
- *EMMONS, S. F., U. S. Geol. Survey, Washington, D. C. (26). 1879. **E**
- Emory, Hon. Frederic, Chief of the Bureau of Foreign Commerce, State Department, Washington, D. C. (52). **I**
- Enders, Howard Edwin, Professor of Biology, Lebanon Valley College, Annville, Pa. (50). **F G**
- *Engelman, George J., M. D., 336 Beacon St., Boston, Mass. (25). 1875. **F H**
- Engle, Horace M., Roanoke, Va. (52). **E**
- Engle, Wilber Dewight, Professor of Chemistry, University of Denver, University Park, Colo. (50). **C**
- *Engler, Edmund Arthur, President Worcester Polytechnic Institute, Worcester, Mass. (50). 1901. **A**
- English, William Thompson, M. D., Professor of Physical Diagnosis, Western University of Pennsylvania, Pittsburg, Pa. (50). **K**
- ENO, A. F., 32 Fifth Avenue, New York, N. Y. (50).
- Eno, John Chester, Waldorf-Astoria Hotel, New York, N. Y. (49).
- Epper, Rev. Frowin, O. S. B., Mt. Angel, Oregon. (50). **F**

MEMBERS AND FELLOWS.

- Esmond, Darwin W., Newburgh, N. Y. (50). **A I**
- ESTES, DANA, Brookline, Mass. (29). **H I**
- *Evans, Alexander W., M. D., 12 High St., New Haven, Conn. (45).
1903. **G**
- Evans, Britton D., M. D., Medical Director of N. J. State Hospital,
Morris Plains, N. J. (51). **K**
- Evans, Henry Brown, 3009 Cambridge Place, Washington, D. C.
(48). **A**
- Evans, Samuel G., 211 Main St., Evansville, Ind. (39). **F**
- Evans-Carrington, Rev. Edward, 227 E. Cucharas St., Colorado
Springs, Colo. (51). **I**
- Evans, Walter Harrison, Ph. D., Department of Agriculture,
Washington, D. C. (52). **G**
- Evermann, Barton Warren, Ichthyologist and Chief of Division
of Fisheries, U. S. Fish Commission, Washington, D. C. (52). **F**
- Evers, Edward, M. D., 1861 N. Market St., St. Louis, Mo. (28). **F H**
- Everts, Orpheus, M. D., Medical Superintendent, The Cincinnati
Sanitarium, Sta. K, Cincinnati, Ohio. (51). **K**
- *Ewell, Ervin E., care German Kali Works, Atlanta, Ga. (40).
1896. **C**
- *Eyerman, John, "Oakhurst," Easton, Pa. (33). 1889. **C E**
- Fahrig, Ernst, Chief of Laboratories, Philadelphia Commercial
Museum, Philadelphia, Pa. (51).
- Faile, Thomas H., Murray Hill Hotel, New York, N. Y. (50).
- *Fairbanks, Henry, Ph. D., St. Johnsbury, Vt. (14). 1874. **A B D**
- Fairchild, B. T., P. O. Box 1120, New York, N. Y. (36).
- *Fairchild, David Grandison, U. S. Dept. Agriculture, Washing-
ton, D. C. (47). 1898. **G**
- *Fairchild, Prof. H. L., Univ. of Rochester, Rochester, N. Y. (28).
1883. **E F**
- Falconer, William, Schenley Park, Pittsburg, Pa. (29).
- Falding, Frederic J., Consulting Chemical Engineer, 52 Broadway,
New York, N. Y. (50). **C**
- Falk, Gustav, 24 East 81st St., New York, N. Y. (50).
- *Fanning, John T., Consulting Engineer, Kasota Block, Minne-
apolis, Minn. (29). 1885. **D**
- *Fargis, Rev. Geo. A., S. J., Georgetown University, Washington
D. C. (40). 1892.
- Farley, Godfrey Pearson, C. E., General Manager, W. W. & F. R. R.
Co., Wiscasset, Maine. (51). **D**
- *Farlow, Dr. W. G., 24 Quincy St., Cambridge, Mass. (20). 1875. **G**
- Farnsworth, Philo J., M. D., Clinton, Iowa. (50). **K**
- Farquhar, Miss Helen, State Normal School, West Chester, Pa.
(50). **A B**
- *Farquhar, Henry, Census Office, Washington, D. C. (32). 1886.
A B G I

MEMBERS AND FELLOWS.

- Farr, Marcus S., Sc. D., Princeton Univ., Princeton, N. J. (49). **E**
- *Farrand, Livingston, M. D., Columbia University, New York, N. Y. (50). 1902. **H**
- Farwell, Elmer S., Steam Engineer, 507 W. 142d St., New York, N. Y. (51). **A D**
- Farwell, Robert Benneson, C. E., 53 Monument Ave., Charlestown, Mass. (47). **D**
- *Fassig, Oliver Lanard, Johns Hopkins University, Baltimore, Md. (46). 1899. **B**
- Fast, Richard Ellsworth, Professor American History and Political Sciences, West Virginia University, Morgantown, W. Va. (50). **I**
- Faught, John B., Professor of Mathematics, Northern State Normal School, Marquette, Mich. (50). **A**
- Fawcett, Ezra, Mechanical and Electrical Engineer, 233 Ely St., Alliance, Ohio. (48). **B D**
- Fay, L. G., Naval Office, 20 Exchange Place, New York, N. Y. (50).
- Fellows, Charles S., 912 Chamber of Commerce, Minneapolis, Minn. (34). **F**
- *Felt, Ephraim Porter, Ph. D., State Entomologist, Albany, N. Y. (44). 1899. **F**
- Fenneman, Nevin M., Ph. D., Professor of Geology, University of Colorado, Boulder, Colo. (51). **E**
- Fényes, Adalbert, M. D., P. O. Box W, Pasadena, Cal. (51). **F**
- Ferguson, Alexander McGowen, Instructor in Botany, Univ. of Texas, Austin, Texas. (51). **G**
- Ferguson, L. L., Optician, 155 Broadway, New York, N. Y. (52). **B**
- Fernald, F. A., Broadway and 117th St., New York, N. Y. (43). **C**
- *Fernow, Bernhard E., Director N. Y. State College of Forestry, Cornell University, Ithaca, N. Y. (31). 1887. **G I**
- Ferril, William C., Curator, State Historical and Natural History Society of Colorado, Denver, Colo. (50). **E F G H I**
- Ferry, Dexter M., Jr., Seedsman, 1040 Woodward Ave., Detroit, Mich. (50). **G**
- *Fessenden, Reginald A., Old Point Comfort, Va. (47). 1899. **A B**
- Fetterman, John Colvin, Castle Shannon, Pa. (51). **E F**
- *Fewkes, Dr. J. Walter, Bureau of Amer. Ethnology, Washington, D. C. (48). 1900. **H**
- Field, George Wilton, Mass. Inst. Tech., Boston, Mass. (47).
- Field, W. L. W., Milton, Mass. (47). **F**
- Finch, John Wellington, State Geologist, Victor, Colo. (50). **E**
- Findlay, Merlin C., Professor of Biology, Park College, Parkville, Mo. (50). **F**

MEMBERS AND FELLOWS.

- *Fink, Prof. Bruce, Upper Iowa Univ., Fayette, Iowa. (45). 1899. **G**
- Finley, Norval Howard, 6638 Deary St., Pittsburg, Pa. (52). **C**
- Fireman, Peter, Ph. D., Cosmos Club, Washington, D. C. (45). **D**
- *Firmstone, F., Easton, Pa. (33). 1887. **D**
- Fischel, Washington E., M. D., 2647 Washington, Ave., St. Louis, Mo. (50). **F K**
- Fischer, Louis Albert, U. S. C. and G. Survey, Washington, D. C. (47). **A B C**
- Fish, Charles Henry, M. E., General Manager, Cocheco Mf'g Co. Dover, N. H. (51). **D**
- *Fish, Pierre A., D. V. S., Ithaca, N. Y. (49). 1901. **K**
- Fish, Walter Clark, General Elec. Co., Lynn, Mass. (50). **D**
- Fishburne, Edward Bell, Jr., President Hoge Memorial Military Academy, Blackstone, Va. (51). **D**
- Fisher, George E., 37 and 39 Wall St., New York, N. Y. (37).
- Fisher, George Egbert, University of Pennsylvania, Philadelphia, Pa. (51).
- Fisher, Henry Wright, Electrical Engineer, S. U. Cable Co., Pittsburg, Pa. (51). **D**
- *Fisher, Irving, Ph. D., 460 Prospect St., New Haven, Conn. (50). 1901. **A I**
- Fisher, Robert Jones, 614 F St., N.W., Washington, D. C. (50). **D**
- Fisher, Robert Welles, M. D., 159 E. 2d South St., Salt Lake City, Utah. (51). **K**
- Fisher, S. Wilson, 1502 Pine St., Philadelphia, Pa. (51). **A**
- Fisk, Herbert F., Principal of the Academy, Northwestern University, Evanston, Ill. (50).
- *Fiske, Prof. Thomas S., Columbia University, New York, N. Y. 1901. (50).
- Fiske, Wilbur A., Professor of Science, Richmond High School, Richmond, Ind. (51). **B**
- *Fitz, George W., M. D., 483 Beacon St., Boston, Mass. (47). 1898. **H**
- Fitz Gerald, Francis A. J., P. O. Box 118, Niagara Falls, N. Y. (50). **C**
- Fitzpatrick, Thomas J., Iowa City, Iowa. (52). **G**
- Flanders, Charles S., Franklin, Mass. (42). **E**
- *Flather, John J., Professor of Mechanical Engineering, University of Minnesota, Minneapolis, Minn. (44). 1896. **D**
- Fleming, John A., U. S. C. and G. Survey, Washington, D. C. (48).
- Fleming, Miss Mary A., The Oxford, 432 Pearl St., Buffalo, N. Y. (47). **E G**
- Flemming, Dudley D., Gas Engineer, 249 Washington St., Jersey City, N. J. (50). **C D**
- *Fletcher, Miss Alice C., Peabody Museum, Cambridge, Mass. (29). 1883. **H**

MEMBERS AND FELLOWS.

- ^F FLETCHER, ANDREW, 339 West 77th St., New York, N. Y. (50).
- *Fletcher, James, Ph. D., Dominion Entomologist, Experimental Farm, Ottawa, Can. (31). 1883. **F**
- *Fletcher, Robert, M. D., Army Medical Museum, Washington, D. C. (29). 1881. **F H**
- *Fletcher, Robert, Ph. D., Director of Thayer School of Civil Engineering, Hanover, N. H. (51). 1902. **D**
- Flexner, Simon, Univ. of Pennsylvania, Philadelphia, Pa. (52). **K**
- Flickinger, Junius R., Sc. D., Principal of Normal School, Pres., Pa. Educational Assn., Normal School, Lock Haven, Pa. (51).
- *Flint, Albert S., Washburn Observatory, Madison, Wis. (30). 1887. **A**
- *Flint, Austin, M. D., LL.D., Professor of Physiology, Cornell University Medical College, New York, N. Y. (50). 1901. **F K**
- *Flint, James M., Surgeon U. S. N., The Shoreham, Washington, D. C. (28). 1882. **F**
- *Focke, Theodore M., Case School of Applied Science, Cleveland, Ohio. (44). 1903. **A B**
- *Foley, Prof. Arthur Lee, Indiana University, Bloomington, Ind. (46). 1900. **B**
- Folkmar, Daniel, D. S. S., care of Civil Service, Manila, P. I. (46). **H I**
- Folsom, David M., Stanford University, Cal. (51). **E**
- Foote, Allen Ripley, Editor of "Public Policy," Home Insurance Building, Chicago, Ill. (52). **I**
- Foote, James S., M. D., Creighton Medical College, Omaha, Neb. (50). **F K**
- Foote, Warren M., 1317 Arch St., Philadelphia, Pa. (50). **C**
- Forbes, Robert H., Professor of Chemistry, University of Arizona, Tucson, Arizona. (50). **C**
- Forcee, Miss Margaret P., M. D., Arch near Ohio St., Allegheny, Pa. (51). **K**
- Ford, Prof. Arthur H., Professor of Electrical Engineering, Georgia School of Technology, Atlanta, Ga. (52). **D**
- Ford, James B., 4 East 43d St., New York, N. Y. (49).
- Fort, I. A., U. P. Land Agent, North Platte, Neb. (51).
- Forwood, Gen. William Henry, M. D., U. S. A., 1425 Euclid Place, N.W., Washington, D. C. (52). **K**
- Foster, George Winslow, M. D., Medical Superintendent, Eastern Maine Insane Hospital, Bangor, Maine. (52). **K**
- Foster, Macomb G., P. O. Box 1120, New York, N. Y. (49).
- Foster, William, Newburgh, N. Y. (50). **I**
- Foulk, Charles W., Assist. Professor of Analytical Chemistry, Ohio State Univ., Columbus, Ohio. (51). **C**
- Fowler, Edwin H., U. S. C. and G. Survey, Washington, D. C. (47).

MEMBERS AND FELLOWS.

- Fox, Charles James, M. D., Lock Box A, Willimantic, Conn. (51). **K**
 Fox, Henry, 5603 Germantown Ave., Germantown, Philadelphia, Pa. (52). **F**
 Fox, William, Asst. Professor Physics, College of the City of New York, New York, N. Y. (50). **B D**
 Foxworthy, Fred. William, Assistant in Botanical Department, Cornell Univ., Ithaca, N. Y. (52). **G**
 Fracker, George Cutler, Professor of Philosophy and Psychology, Coe College, Cedar Rapids, Iowa. (52). **H**
 Fraenkel, Joseph, M. D., 46 East 75th St., New York, N. Y. (50). **K**
 Francis, Charles Kenworthy, Ph. B., Adjunct Prof. of Chemistry, Ga. School of Technology, Atlanta, Ga. (50). **C**
 Francisco, M. Judson, 49 Merchants' Row, Rutland, Vt. (50). **I**
 *Frankforter, George B., University of Minnesota, Minneapolis, Minn. (43). 1901. **C**
 Frankland, Frederick W., 346 Broadway, New York, N. Y. (50).
 *Franklin, Mrs. C. Ladd, 516 Park Ave., Baltimore, Md. (47). 1899. **H**
 *Franklin, Edward Curtis, Ph. D., Kansas State Univ., Lawrence, Kan. (47). 1900. **B G**
 *Franklin, William S., Lehigh University, So. Bethlehem, Pa. (36). 1892. **B**
 *FRAZER, DR. PERSIFOR, Drexel Building, Room 1042, Philadelphia, Pa. (24). 1879. **C E**
 *Frazier, Prof. B. W., Lehigh University, So. Bethlehem, Pa. (24). 1882. **C E**
 *Frear, William, State College, Pa. (33). 1886. **C**
 Frederick, Charles Warnock, U. S. Naval Observatory, Washington, D. C. (50). **A B C**
 Freeborn, George C., M. D., 215 West 70th St., New York, N. Y. (50). **K**
 *Freedman, William Horatio, Professor of Electrical Engineering, University of Vermont, Burlington, Vt. (50). 1901. **B D**
 Freeman, Charles, Ph. D., Director of Clark Chemical Laboratory, Westminster College, New Wilmington, Pa. (50). **C**
 Freeman, Prof. T. J. A., Loyola College, Baltimore, Md. (33). **B C**
 *Freer, Prof. Paul C., Ann Arbor, Mich. (39). 1891. **C**
 Freley, Jasper Warren, Wells College, Aurora, N. Y. (45). **B E**
 French, E. L., Crucible Steel Co. of America, Syracuse, N. Y. (51). **C**
 French, Owen B., U. S. Coast and Geodetic Survey, Washington, D. C. (52). **A D E**
 *French, Prof. Thomas, Jr., Amherst, Mass. (30). 1883. **B**
 Fretz, Augustus Henry, Doylestown, Pa. (50).
 Fretz, John Edgar, M. D., 112 North 3d St., Easton, Pa. (46). **F G H**

MEMBERS AND FELLOWS.

- Frick, Prof. John H., Dept. of Mathematics, Central Wesleyan College, Warrenton, Mo. (27). **A B E F**
- Friedenwald, Harry, M. D., Associate Prof. of Ophthalmology and Otology, College of Phys. and Surgs., 1029 Madison Ave., Baltimore, Md. (51). **K**
- Friend, Samuel Henry, M. D., 141 Wisconsin St., Milwaukee, Wis. (51). **K**
- *Fries, Dr. Harold H., 92 Reade St., New York, N. Y. (40). 1898. **C**
- FRISBIE J. F., M. D., Box 455, Newton, Mass. (29). **E H**
- *Frisby, Prof. Edgar, U. S. Naval Observatory, Washington, D. C. (28). 1880. **A**
- Frissell, Rev. Hollis Burke, LL. D., Principal of Hampton Normal and Agr. Institute, Hampton, Va. (52). **I**
- Frissell, H. S., President of the Fifth Avenue Bank of N. Y., 5th Ave and 44th St., New York, N. Y. (52). **I**
- Frost, Arthur Barzilla, 33 Fay St., E. Cleveland, Ohio. (53). **C**
- *Frost, Edwin Brant, Yerkes Observatory, Williams Bay, Wis. (38). 1890. **A B**
- Frost, George H., C. E., Editor of "Engineering News," 220 Broadway, New York, N. Y. (50). **B D**
- Frost, William Dodge, Instructor in Bacteriology, University of Wisconsin, Madison, Wis. (50). **F**
- FROTHINGHAM, MRS. FREDERICK, 152 Pawtucket St., Lowell, Mass. (31). **A F I**
- Fuller, Arthur Levens, Brunner, Kans. (50). **C**
- Fuller, Charles Gordon, M. D., Reliance Building, Chicago, Ill. (35). **F**
- *Fuller, George W., 170 Broadway, New York, N. Y. (50). 1903. **K**
- *Fuller, Prof. Homer T., President Drury College, Springfield, Mo. (35). 1891. **C E**
- *Fuller, Melville W., LL.D., Chief Justice U. S. Supreme Court, 1801 F St., N.W., Washington, D. C. (40). 1901. **I**
- FULLER, MYRON L., Assistant Geologist, U. S. Geological Survey, Washington, D. C. (50). **E**
- Fullmer, Edward Lawrence, Prof. of Natural Science, Dakota Univ., Mitchell, S. D. (50). **F**
- *Fulton, Robert B., Chancellor Univ. of Mississippi, University, Miss. (21). 1887. **A B**
- Fulton, Weston Miller, Instructor in Meteorology, University of Tennessee, Knoxville, Tenn. (50). **B**
- Furlow, Floyd Charles, Professor of Experimental Engineering, Georgia School of Technology, Atlanta, Ga. (50). **D**
- *Furness, Miss Caroline E., Vassar College Observatory, Poughkeepsie, N. Y. (47). 1899. **A**

MEMBERS AND FELLOWS.

- Furst, Clyde, Secretary of Teachers' College, Columbia University, New York, N. Y. (52).
- Gable, George D., Ph. D., Parsons College, Fairfield, Iowa. (40).
- A B**
- Gaff, Thomas T., 1738 M St., Washington, D. C. (52).
- *Gage, Prof. Simon Henry, Cornell University, Ithaca, N. Y. (28). 1881. **F**
- *Gage, Mrs. Susanna Phelps, Ithaca, N. Y. (48). 1900. **F**
- Gage-Day, Mary, M. D., 207 Wall St., Kingston-on-Hudson, N. Y. (51). **K**
- Gager, C. Stuart, Professor of Biologic Science, New York State Normal College, Albany, N. Y. (50). **F G**
- Gahagan, William L., M. D., 141 Broadway, New York, N. Y. (51). **K**
- *Galbraith, Prof. John, School of Practical Science, Toronto, Can. (38). 1889. **D**
- *Galloway, B. T., U. S. Dept. Agriculture, Washington, D. C. (37). 1890. **G**
- *Galloway, Thomas Walton, James Milliken Univ., Decatur, Ill. (45). 1901. **F G**
- *Ganong, Wm. F., Professor of Botany, Smith College, Northampton, Mass. (49). 1900. **G**
- Gantt, Henry Lawrence, Consulting Engineer, care American Locomotive Co., Schenectady, N. Y. (51). **D I**
- Ganz, Albert Frederick, M. E., Professor of Applied Electricity, Stevens Institute, Hoboken, N. J. (52). **A B D**
- Garcin, Ramon D., M. D., 2618 E. Broad St., Richmond, Va. (51). **K**
- Gardiner, Charles Fox, M. D., 818 N. Cascade Ave., Colorado Springs, Colo. (51). **K**
- Gardiner, Edward G., Ph. D., 131 Mt. Vernon St., Boston, Mass. (51).
- Gardiner, Rev. Frederic, Jr., Yeates School, Lancaster, Pa. (47). **F H**
- Gardner, Rev. Corliss B., Ripley, N. Y. (29). **A B I**
- Gardner, Geo. Clinton, 416 Beach St., N., Richmond Hill, New York, N. Y. (50).
- Garland, Jos. E., M. D., 17 Pleasant St., Gloucester, Mass. (51). **K**
- Garnier, Madame Laure Russell, The Castle, Tarrytown, N. Y. (40).
- Garrett, Albert O., 1242 Milton Ave., Salt Lake City, Utah. (50). **G**
- Garriott, Edward B., U. S. Weather Bureau, Washington, D. C. (49).
- Garrison, Harriet E., M. D., 105 E. Second St., Dixon, Ill. (51). **K**
- Garver, John A., 44 Wall St., New York, N. Y. (49).
- Garvin, John B., Instructor in Chemistry, High School District No. 1. Denver, Colo. (50). **C**

MEMBERS AND FELLOWS.

- Gates, Fanny Cook, Instructor in Physics, Woman's College, Baltimore, Md. (50). **A B**
- Gault, Franklin B., 602 N. I St., Tacoma, Wash. (43).
- Gause, Fred Taylor, Manager Standard Oil Co. of New York, T. and B. Dept. Yokohama, Japan. (40).
- Gauss, Robert, Editor "Denver Republican," Denver, Colo. (50). **I**
- Geisler, Joseph F., New York, Mercantile Exchange, New York, N. Y. (50).
- *GENTH, FRED. A., 103 N. Front St., Philadelphia, Pa. (32). 1900. **C E**
- *Genthe, Karl Wilhelm, Ph. D., Instructor in Zoology, Trinity College, Hartford, Conn. (50). 1901. **F**
- George, Russell D., Professor of Geology, University of Colorado, Boulder, Colo. (53). **G**
- *Germann, George B., 90 Norman Ave., Brooklyn, N. Y. (49). 1901. **A**
- Getman, Frederick H., Johns Hopkins University, Baltimore, Md. (45). **B**
- *GIBBS, PROF. WOLCOTT, Newport, R. I. (1). 1896. **B C**
- Gibson, George H., 476 West 141st St., New York, N. Y. (51). **D I**
- *Gies, William J., College of Physicians and Surgeons, 437 West 59th St., New York, N. Y. (49). 1901. **C**
- Gifford, Harold, M. D., 405 Karbach Block, Omaha, Neb. (51). **K**
- *Gifford, John Clayton, New York State College of Forestry, Ithaca, N. Y. (50). 1902. **G**
- Gilbert, Charles B., Supt. Public Instruction, 106 Brunswick St., Rochester, N. Y. (50). **I**
- *GILBERT, G. K., U. S. Geol. Survey, Washington, D. C. (18). 1874. **E**
- Gilbert, Norman Everett, Professor of Physics, Dartmouth College, Hanover, N. H. (51). **B**
- Gilchrist, John D. F., Ph. D., Government Biologist of Cape Colony, Department of Agriculture, Cape Town, South Africa. (53). **FG**
- Gilchrist, T. Caspar, 317 N. Charles St., Baltimore, Md. (52).
- Gildersleeve, Nathaniel, M. D., Assistant in Bacteriology, Laboratory of Hygiene, University of Pennsylvania, Philadelphia, Pa. (52). **K**
- *Gill, Adam Capen, Cornell University, Ithaca, N. Y. (38). 1894. **E**
- *Gill, Augustus Herman, Mass. Institute Technology, Boston, Mass. (44). 1896. **C**
- *Gill, Theodore Nicholas, M. D., Cosmos Club, Washington, D. C. (17). 1874. **F**
- *Gillette, Clarence P., Professor of Zoology, Agricultural College, Fort Collins, Colo. (50). 1901. **F**
- Gilman, Charles Edward, Stanford University, Cal. (51). **E**

MEMBERS AND FELLOWS.

- *Gilman, Daniel C., Johns Hopkins University, Baltimore, Md. (10). 1875. **E H**
- *Girty, George H., Ph. D., U. S. Geol. Survey, Washington, D. C. (48). 1903. **E**
- Glaser, C., Analytical and Consulting Chemist, 21 S. Gay St., Baltimore, Md. (49).
- Gleason, H. Allan, Asst. in Botany, Univ. of Illinois, Champaign, Ill. (50). **G**
- Gleason, W. Stanton, M. D., 143 Grand St., Newburgh, N. Y. (50). **F K**
- *Glenn, L. C., Ph. D., Professor of Geology, Vanderbilt University, Nashville, Tenn. (50). 1903. **E**
- *Glenn, William, 1348 Block St., Baltimore, Md. (33). 1893. **C**
- GLENNY, WILLIAM H., Buffalo, N. Y. (25).
- Glover, Charles Carroll, 1703 K St. N.W., Washington, D. C. (52). **I**
- Godfrey, Chas. C., M. D., 753 Lafayette St., Bridgeport, Conn. (51). **K**
- Godkin, Mrs. E. L., 36 W. 10th St., New York, N. Y. (49).
- *Goessmann, Prof. C. A., Mass. Agric. College, Amherst, Mass. (18). 1875. **C**
- Gold, Rev. Dr. James Douglas, Covington, Ohio. (50). **I**
- *Gold, Theodore S., West Cornwall, Conn. (4). 1887. **B C**
- Golden, Harry E., Civil Engineer, Mann Building, Utica, N. Y. (51). **D**
- *Golden, Miss Katherine E., Purdue University, Lafayette, Ind. (42). 1897. **G**
- Goldsborough, John Byron, Croton-on-Hudson, N. Y. (51).
- *Goldschmidt, S. A., Ph. D., 43 Sedgwick St., Brooklyn, N. Y. (24). 1880. **B C E**
- *Goldsmith, Edw., 658 N. 10th St., Philadelphia, Pa. (29). 1892. **B C**
- Goldthwait, James Walter, Assistant in Geology, Harvard University, Cambridge, Mass. (51). **E**
- Goldthwaite, Miss Nellie Esther, Mount Holyoke College, So. Hadley, Mass. (47). **C**
- Gomberg, Moses, Sc. D., 1101 E. University Ave., Ann Arbor, Mich. (51). **C**
- *Gooch, Frank A., Yale University, New Haven, Conn. (25). 1880. **C**
- *Goodale, Prof. George Lincoln, Botanic Gardens, Cambridge, Mass. (18). 1875. **G**
- Goodale, Joseph Lincoln, M. D., 397 Beacon St., Boston, Mass. (50). **F K**
- Goode, John Paul, Instructor in Geography, University of Pennsylvania, Philadelphia, Pa. (52). **E H I**
- Goodnow, Henry R., 95 Riverside Drive, New York, N. Y. (32). **B**

MEMBERS AND FELLOWS.

- *Goodspeed, Arthur Willis, Ph. D., Dept. Physics, University of Pennsylvania, Philadelphia, Pa. (47). 1898. **A B**
- Goodwin, Elmer Forrest, Principal and Prof. Physics and Chemistry Concord Branch, West Virginia State Normal School, Athens, W. Va. (50). **B C**
- *Goodwin, Harry M., Professor of Physical Chemistry, Mass. Institute Technology, Boston, Mass. (47). 1901. **B**
- Goodwin, Rev. James, 76 Garden St., Hartford, Conn. (52). **I**
- *Goodyear, William H., Museum of Brooklyn Institute of Arts and Sciences, Eastern Parkway, Brooklyn, N. Y. (43). 1902. **H**
- Gordon, Charles Henry, Ph. D., Supt. of Schools and Instructor in Geology and Geography in the Univ. of Nebraska, Lincoln, Neb. (52). **E**
- Gordon, Clarence McC., Ph. D., Professor of Physics, Centre College, Danville, Ky. (48). **A B C**
- Gordon, Gustavus Ede, Scientific Director, Walker Gordon Laboratory Co., Chevy Chase, Md. (51). **F**
- Gordon, Leonard J., M. D., President Free Public Library, Jersey City, N. J. (52). **K**
- Gordon, Reginald, Newburgh, N. Y. (50).
- Gordon, Robert H., Cumberland, Md., (48). **E F**
- Gore, J. W., Professor Physics, Univ. of N. C., Chapel Hill, N. C. (51). **B**
- *Goss, Prof. Wm. F. M., Lafayette, Ind. (39). 1896.
- Gossard, Harry Arthur, Professor of Entomology, Florida Agricultural College, Lake City, Fla. (51). **F**
- Goucher, John Franklin, President of The Woman's College, Baltimore, Md. (50).
- *Gould, George Milbry, M. D., 1631 Locust St., Philadelphia, Pa. (51). 1902. **K**
- Gould, H. P., 1219 13th St., N.W., Washington, D. C. (52). **G**
- Gouldy, Miss Jennie A., Newburgh, N. Y. (50). **I**
- Grabill, H. P., 1004 Enas Ave., Des Moines, Iowa. (50). **C**
- Graef, Edw. L., 58 Court St., Brooklyn, N. Y. (28). **F**
- Graham, Andrew B., 1230 Pa. Ave., N.W., Washington, D. C. (52). **I**
- Graham, Douglas, M. D., 74 Boylston St., Boston, Mass. (51). **K**
- Graham, James Chandler, Chemist, Phillips Academy, Andover, Mass. (50). **C**
- Graham, Robert Dunn, 281 Fourth Ave., New York, N. Y. (50).
- Granbery, Julian Hastings, Engineer and Electrician, 561 Walnut St., Elizabeth, N. J. (50). **D**
- Granger, Arthur O., Cartersville, Ga. (50). **A B**
- *Grant, Ulysses Sherman, Ph. D., Professor of Geology, Northwestern University, Evanston, Ill. (50). 1902. **E**

MEMBERS AND FELLOWS.

- Grant, Willis Howard, 744 South Ave., Wilkensburg, Pa. (51). **C G**
- Granville, William Anthony, Ph. D., Instructor in Mathematics, Yale University, New Haven, Conn. (50). **A**
- *Gratacap, L. P., 77th St. and 8th Ave., New York, N. Y. (27). 1884. **C E F**
- *Gray, Prof. Thomas, Terre Haute, Ind. (38). 1889. **D**
- Greeff, Ernest F., 37 W. 88th St. New York, N. Y. (49).
- *Green, Arthur L., Purdue University, Lafayette, Ind. (33). 1888. **C**
- *Green, Bernard Richardson, Civil Engineer, Supt. of Congressional Library Building, 1738 N St., N.W., Washington, D. C. (51). 1903. **B D**
- Greene, Chas. Lyman, M. D., 150 Lowry Arcade, St. Paul, Minn. (51). **K**
- *Greene, Charles Wilson, Ph. D., Professor of Physiology, State University of Missouri, Columbia, Mo. (50). 1901. **F K**
- Green, Edgar Moore, M. D., Easton, Pa. (36). **C G H**
- Greene, G. K., 127 W. Market St., New Albany, Ind. (38).
- Green, Horace, care "Sunday American and Journal," 15 Spruce St., New York, N. Y. (50).
- Green, Miss Isabella M., 111 Union Place, Akron, Ohio. (47).
- Greene, Jacob L., President Mut. Life Insurance Co., Hartford, Conn. (23).
- Green, Milbrey, M. D., 567 Columbus Ave., Boston, Mass. (29).
- Greenalch, Wallace, Deputy City Engineer, Albany, N. Y. (51). **D**
- *Greenman, Jesse M., 875 Doan St., Cleveland, Ohio. (47). 1899. **G**
- Greenough, Charles Pelham, Attorney at law, 39 Court St., Boston, Mass. (50). **I**
- Greenough, John, 31 W. 35th St., New York, N. Y. (49).
- Gregg, William H., M. D., Port Chester, N. Y. (49).
- *Gregory, Miss Emily Ray, Ph. D., Professor of Biology, Wells College, Aurora, N. Y. (50). 1901. **F**
- *Gregory, Herbert E., Yale University, New Haven, Conn. (50). 1902. **E**
- Griffin, Gen. Eugene, First Vice-President, General Electric Co., 44 Broad St., New York, N. Y. (50). **D**
- Griffith, C. J., Instructor in Dairying, Agricultural College, Fort Collins, Colo. (50). **F**
- Griffith, Herbert Eugene, Professor of Chemistry, Knox College, Galesburg, Ill. (50). **C**
- Griffith, John Howell, Professor of Mathematics and Civil Engineering, Clarkson School of Technology, Potsdam, N. Y. (50). **D**
- *Griffiths, David, Div. Agrostology, U. S. Dept. Agriculture, Washington D. C. (49). 1903. **G**

MEMBERS AND FELLOWS.

- Griggs, Robert F., Professor of Biology, Fargo College, Fargo, N. Dak. (52). **G**
- Grimm, Carl Robert, Bridge and Structural Engineer, 1622 Caton Ave., Flatbush, Brooklyn, N. Y. (51). **D**
- Grimsley, George Perry, Professor of Geology, Washburn College, Topeka, Kansas. (51). **E**
- *Grindley, Dr. Harry Sands, Associate Professor of Chemistry, University of Illinois, Urbana, Ill. (46). 1898. **C**
- *Grinnell, George Bird, 346 Broadway, New York, N. Y. (25). 1885. **E F**
- Griswold, Clifford S., Head of Dept. of Physics, Groton School, Groton, Mass. (50). **B**
- *Griswold, Leon Stacy, 238 Boston St., Dorchester, Mass. (38). 1893. **E**
- Groat, Benjamin Feland, Assistant Professor of Mathematics and Mechanics, University of Minnesota, Minneapolis, Minn. (51). **A**
- Grosskopf, Ernest C., M. D., Medical Superintendent Milwaukee County Hospital, Wauwatosa, Wis. (51). **K**
- Grosvenor, Edwin P., 414 West 118th St., New York, N. Y. (52).
- Grosvenor, Gilbert H., "National Geographic Magazine," Corcoran Bldg., Washington, D. C. (48). **E I**
- Groszmann, Maximilian P. E., Director of the Groszmann School for Atypical and Nervous Children, "Pinehurst," Depot Lane, Washington Heights, New York, N. Y. (52). **K**
- *Grout, Abel J., Boys' High School, Brooklyn, N. Y. (47). 1899. **G**
- Grove, G. W., M. D., Gold Ave., Albuquerque, N. M. (52). **K**
- Grover, Edwin Osgood, General Editor for Rand, McNally and Co., Highland Park, Ill. (52).
- Grover, Frederick Orville, Professor of Botany, Oberlin College, Oberlin, Ohio. (50). **G**
- Grower, Geo. G., Ansonia, Conn. (43). **B D**
- Gruenberg, Benjamin C., Teacher of Biology, De Witt Clinton High School, 60 W. 13th St., New York, N. Y. (52). **G**
- *Gruener, Hippolyte, Adelbert College, Cleveland, Ohio. (44). 1898.
- Gulick, Luther Halsey, M. D., Pratt Institute, Brooklyn, N. Y. (52). **K**
- *Gulliver, F. P., St. Marks School, Southboro, Mass. (40). 1900. **E**
- Gummere, Henry Volkmar, Professor of Mathematics, Physics and Astronomy, Ursinus College, Collegeville, Pa. (51). **A B**
- Guth, Morris S., M. D., Supt. State Hospital for the Insane, Warren, Pa. (51). **K**
- *Guthe, Karl E., Ph. D., National Bureau of Standards, Washington, D. C. (45). 1897. **B**
- Guthrie, Joseph E., Instructor in Zoology, Iowa State College, Ames, Iowa. (52). **F**

MEMBERS AND FELLOWS.

- Guthrie, William Alvis, M. D., Franklin, Ky. (51). **K**
 Guthrie, William E., M. D., Bloomington, Ill. (51). **K**
 Gutiérrez, Manuel R., Professor of Physics, Normal School, Calle de las Victimas num. 1, Jalapa, Vera Cruz, Mexico. (50). **B**
 Guyer, Prof. M. F., University of Cincinnati, Cincinnati, Ohio. (52). **F G**
 Hadley, Artemus N., Box 313, Indianapolis, Ind. (51). **D**
 *Hagar, Stansbury, 48 Wall St., New York, N. Y. (43). 1899.
 Hager, Albert Ralph, Instructor in Physics and Chemistry, Manila Normal School, Manila, P. I. (52). **B C**
 *Hague, Arnold, U. S. Geol. Survey, Washington, D. C. (26). 1879.
E
 *Hague, James D., 18 Wall St., New York, N. Y. (50). 1903. **E**
 Hailman, James D., C. E., Shady Ave., Pittsburg, Pa. (51). **A B**
 *Haines, Reuben, Haines and Chew Sts., Germantown, Philadelphia, Pa. (27). 1889. **B C**
 Haines, Thomas Harvey, Ph. D., Assistant Professor of Philosophy, Ohio State University, Columbus, Ohio. (52). **H**
 *Hale, Albert C., Ph. D., 352A Hancock St., Brooklyn, N. Y. (20). 1886. **B C**
 Hale, George D., 1059 Lake Ave., Rochester, N. Y. (41).
 *Hale, George E., Yerkes Observatory, Williams Bay, Wis. (37). 1891. **A B C**
 *Hale, William H., Ph. D., 40 First Place, Brooklyn, N. Y. (10). 1874. **A B C E F H I**
 *Hall, Asaph, U. S. N., South Norfolk, Conn. (25). 1877. **A**
 *Hall, Asaph, Jr., University of Michigan, Ann Arbor, Mich. (38). 1890. **A**
 Hall, Charles M., Vice-President Pittsburg Reduction Co., Niagara Falls, N. Y. (50). **C**
 *Hall, C. W., Dean College of Engineering Met. and Mechan. Arts, University of Minnesota, Minneapolis, Minn. (28). 1883. **D E**
 Hall, Edwin Bradford, Wellsville, N. Y. (50). **C**
 *Hall, Edwin H., 5 Avon St., Cambridge, Mass. (29). 1881. **B**
 Hall, Fred. C., Jr., M. D., Cuba, Kansas. (51). **K**
 Hall, James P., 6 Poplar St., Brooklyn, N. Y. (40). **A B**
 Hall, Joseph Underwood, M. D., 216 Autumn St., San José, Cal. (51). **K**
 *Hall, Prof. Lyman B., Haverford College, Haverford, Pa. (31). 1884. **C**
 Hall, Robert William, 331 Church St., Bethlehem, Pa. (50). **F**
 Hall, William Bonnell, M. D., Professor of Materia Medica and Physiology, University of the South, Sewanee, Tenn. (51). **K**
 Hall, William Shafer, Professor of Mining and Graphics, Lafayette College, Easton, Pa. (50). **E**

MEMBERS AND FELLOWS.

- Hall, Winfield Scott, Ph. D., Professor of Physiology, Northwestern University Medical School, 2431 Dearborn St., Chicago, Ill. (52). **H K**
- Hallack, H. Tuthill, M. D., Alcott, Colo. (51). **K**
- Halley, Robert Burns, Professor of Physics and Chemistry, Sam Houston Normal Institute, Huntsville, Texas. (50). **B C**
- *Hallock, Albert P., Ph. D., 440 First Ave., New York, N. Y. (31). 1896. **C**
- Hallock, Frank Kirkwood, M. D., Cromwell, Conn. (50). **K**
- *Hallock, Dr. William, Columbia University, New York, N. Y. (40). 1883. **B E**
- *Hallowell, Prof. Susan M., Wellesley College, Wellesley, Mass. (33). 1890. **G**
- *Halsted, Byron D., Rutgers College, New Brunswick, N. J. (29). 1883. **G**
- *Halsted, George Bruce, M. D., Kenyon College, Gambier, Ohio. (43). 1896.
- *Halsted, William Stewart, 1201 Eutaw Place, Baltimore, Md. (50). 1903. **K**
- Ham, Judson B., Teacher Natural Science, Vt. State Normal School, Johnson, Vermont. (50). **F G**
- *Hamaker, John Irvin, Professor of Geology and Biology, Trinity College, Durham, N. C. (50). 1901. **E F**
- *Hambach, Dr. G., 1319 Lami St., St. Louis, Mo. (26). 1891. **E F**
- Hamilton, William, Ph. D., U. S. Bureau of Education, Washington, D. C. (52). **E**
- Hammatt, Clarence Sherman, Electrical and Mechanical Engineer, Jacksonville, Fla. (50). **D**
- Hammel, Wm. C. A., Department of Physics, State Normal School, Baltimore, Md. (50). **B F**
- Hammer, William Joseph, Consulting Electrical Engineer, 1406 Havemeyer Building, New York, N. Y. (52). **B**
- Hammond, Mrs. Eliza F., 1689 Cambridge St., Cambridge, Mass. (46).
- Hammond, George W., Yarmouthville, Maine. (47).
- *Hammond, John Hays, Mining Engineer, Denver, Colo. (50). 1901. **D E**
- Hammond, Mrs. John Hays, 32 Riverside Drive, New York, N. Y. (50). **H**
- *HANAMAN, C. E., Troy, N. Y. (19). 1883. **F**
- Hance, Anthony M., 2024 DeLancey Place, Philadelphia, Pa. (51). **C**
- Hancock, James Cole, M. D., 43 Cambridge Place, Brooklyn, N. Y. (51). **K**
- Harbaugh, Miss Joanna V. S., Mt. Vernon Seminary, 1100 M St., N.W., Washington, D. C. (52). **I**

MEMBERS AND FELLOWS.

- Hard, Jas. M. B., Cordobanes 16, City of Mexico, Mexico. (50). **C**
- *Harding, Everhart Percy, Instructor in Chemistry, University of Minnesota, Minneapolis, Minn. (50). 1901. **C**
- Harding, Harry A., State Experiment Station, Geneva, N. Y. (48). **G**
- Hardy, Edward R., 31 Allen St., Boston, Mass. (49). **I**
- *Hargitt, Prof. Charles W., Syracuse University, Syracuse, N. Y. (38). 1891. **F**
- Harmon, Miss A. Maria, 171 McLaren St., Ottawa, Can. (31). **F H**
- Harmon, Herbert W., South-Western State Normal School, California, Pa. (52). **B**
- Harnly, Henry Jacob, Ph. D., Professor of Biology, McPherson College, McPherson, Kan. (50). **F G**
- *Harper, Henry Winston, M. D., The University of Texas, Austin, Texas. (45). 1899. **C**
- Harper, R. H., M. D., Afton, Indian Ter. (51). **F K**
- Harper, William R., LL.D., President University of Chicago, Chicago, Ill. (53).
- Harrah, C. J., P. O. Box 1606, Philadelphia, Pa. (48). **H**
- Harriman, George B., 2A Park St., Boston, Mass. (52). **K**
- *Harris, Abram Winegardner, Sc. D., Port Deposit, Md. (40). 1895. **C**
- Harris, Mrs. Carolyn W., 125 St. Marks Ave., Brooklyn, N. Y. (50). **G**
- *Harris, Prof. Elijah P., Amherst College, Amherst, Mass. (44). 1896.
- Harris, Frederick S., P. O. Box 382, Kansas City, Mo. (50). **E**
- HARRIS, J. CAMPBELL, 119 So. 16th St., Philadelphia, Pa. (51).
- Harris, James Arthur, Shaw School of Botany, St. Louis, Mo (52). **F G**
- Harris, Robert Wayne, M. D., 621 Vincennes St., New Albany, Ind. (51). **K**
- *Harris, Rollin Arthur, U. S. C. and G. Survey, Washington, D. C. (47). 1899. **A**
- *Harris, Uriah R., Commander, U. S. N., U. S. Naval Station, Olongapo, P. I. (34). 1886. **A**
- Harrison, Judge Lynde, 52 Hillhouse Ave., New Haven, Conn. (50). **I**
- Harrison, Robert Henry, M. D., Columbus, Texas. (50). **F K**
- Hart, Charles A., Assistant to State Entomologist, Univ. of Illinois, Urbana, Ill. (51). **F**
- *Hart, Edw., Ph. D., Lafayette College, Easton, Pa. (33). 1885. **C**
- Hart, James Norris, Professor of Mathematics and Astronomy, Univ. of Maine, Orono, Maine. (51). **A**

MEMBERS AND FELLOWS.

- Hart, Joseph Hall, Ph. D., Instructor in Physics, Randal Morgan Laboratory, Univ. of Penn., Philadelphia, Pa. (52). **B**
- Hart, Rev. Prof. Samuel, Berkeley Divinity School, Middletown, Conn. (22). **A**
- Harte, Richard H., M. D., 1503 Spruce St., Philadelphia, Pa. (52). **K**
- Hartgering, James, Rapid City, S. Dak. (52). **C D**
- Hartley, Chas. P., Assistant in Plant Breeding, Bureau of Plant Industry, Dept. Agriculture, Washington, D. C. (51). **G**
- Hartley, Frank, Principal of Allegheny County Academy, Cumberland, Md. (51). **E G**
- Hartness, James, President of Jones and Lamson Machine Co., Springfield, Vt. (51). **D**
- Hartz, J. D. Aug., College Point, N. Y. (43).
- Hartzell, Prof. J. Culver, Illinois Wesleyan Univ., Bloomington, Ill. (49). **E**
- Harvey, Nathan Albert, Ph. D., Vice-Principal Chicago Normal School, 631 West 65th Place, Englewood, Chicago, Ill. (52). **F**
- Harvey, Wm. Stocker, 119 So. 4th St., Philadelphia, Pa. (47).
- Harvie, Miss Lelia Jefferson, Coast and Geodetic Survey, Washington, D. C. (52). **A**
- Hasie, Montague S., C. E., Manager of American Bridge Co. of New York, Dallas, Texas. (51). **D**
- *Haskell, Eugene E., Campau Building, Detroit, Mich. (30). 1896. **A B D**
- Hasslacher, Jacob, 100 William St., New York, N. Y. (50).
- *HASTINGS, C. S., Sheffield Scientific School, Yale University, New Haven, Conn. (25). 1878. **B**
- Hastings, Edwin George, Asst. Bacteriologist, Agr. Exp. Station, Madison, Wis. (50). **F**
- *Hatcher, John Bell, Carnegie Museum, Pittsburg, Pa. (50). 1903. **E F**
- Haupt, Herman, C. E., The Concord, Washington, D. C. (51). **D**
- *Haupt, Gen. Lewis Muhlenberg, C. E., Consulting Engineer, 107 North 35th St., Philadelphia, Pa. (51). 1903. **D**
- Havemeyer, W. F., 32 Nassau St., New York, N. Y. (50).
- Hawkins, J. Dawson, Colorado Springs, Colo. (50). **C D**
- *Hay, Prof. Oliver Perry, Amer. Mus. Nat. History, Central Park, New York, N. Y. (49). 1901. **F**
- Hay, Prof. William P., Howard Univ., Washington, D. C. (49).
- Hayes, C. Willard, U. S. Geological Survey, Washington, D. C. (51). **E**
- Hayes, Ellen, Wellesley, Mass. (52).
- Hayes, George Washington, C. E., Lebanon, Pa. (51). **C D**
- Hayes, Joel Addison, Banker, Colorado Springs, Colo. (51).

MEMBERS AND FELLOWS.

- Hayes, Noah, M. D., Seneca, Nemaha Co., Kansas. (51). **K**
- *Hayford, John F., C. E., U. S. C. and G. Survey, Washington, D. C. (46). 1898. **A B D**
- Haynes, Prof. Arthur E., College of Engineering, University of Minnesota, Minneapolis, Minn. (45).
- Haynes, Miss Caroline C., 16 East 36th St., New York, N. Y. (52).
- *Haynes, Prof. Henry W., 239 Beacon St., Boston, Mass. (28). 1884. **H**
- Haynes, Miss Julia Anna, 428 Hamilton Place, Ann Arbor, Mich. (47). **F G**
- Hays, B. Frank, Bensonhurst, N. Y. (49).
- Hays, Charles I., care North Side High School, Denver, Colo. (50). **C G**
- *Hays, Willet M., Professor of Agriculture, University of Minnesota, St. Anthony Park, Minn. (45). 1901. **G I**
- Haywood, Prof. John, Otterbein University, Westerville, Ohio (30). **A B**
- Hazard, Daniel L., U. S. C. and G. Survey, Washington, D. C. (48).
- Hazard, Hon. Rowland G., Peace Dale, R. I. (50).
- *Hazen, Tracy Elliott, 174 W. 87th St., New York, N. Y. (50). 1902. **G**
- Head, W. R., 5467 Jefferson Ave., Hyde Park, Chicago, Ill. (38). **F**
- Headlee, T. J., Teacher of Science, Rensselaer City Schools, Rensselaer, Ind. (52). **F**
- Heald, Fred. DeForest, Ph. D., Professor of Biology, Parsons College, Fairfield, Iowa. (50). **F**
- Hearn, Rev. David William, President College of St. Francis Xavier, 30 West 16th St., New York, N. Y. (52). **I**
- Heath, Harry E., Chief Engineer, The Eddy Electric Mfg. Co., Windsor, Conn. (50). **D**
- Heaton, Augustus George, 1618 17th St., N.W., Washington, D. C. (52).
- Hebbard, Ellery Cola, M. D., 122 Huntington Ave., Boston, Mass. (51). **K**
- Hebden, Edwin, Principal of Group A, Public Schools, 730 Colorado Ave., Baltimore, Md. (50). **E**
- Heck, Charles McGee, 1507 R St., Lincoln, Neb. (51). **B**
- Hedgcock, George Grant, Mo. Botanical Garden, St. Louis, Mo. (50). **G**
- Hedge, Frederic H., 440 Boylston St., Brookline, Mass. (28). **F H**
- *Hedrick, Henry B., Nautical Almanac Office, U. S. Naval Observatory, Washington, D. C. (40). 1896. **A**
- Hefferan, Miss Mary, Univ. of Chicago, Chicago, Ill. (52). **F**
- Heffrin, Harry, care The Columbus Iron and Steel Co., Columbus, Ohio. (52). **D**

MEMBERS AND FELLOWS.

- Heilprin, Angelo, Academy Natural Sciences, Philadelphia, Pa. (52). **E**
- Heisler, Chas. L., M. E., Mgr. and Engineer, Heisler Pumping Engine Co., 909 W. 8th St., Erie, Pa. (51). **D**
- Hektoen, Ludwig, Professor of Pathology, University of Chicago, Chicago, Ill. (52). **K**
- Heller, Napoleon B., Professor of Mathematics and Astronomy, Fort Worth University, Fort Worth, Texas. (50). **A**
- Hellick, Chauncey Graham, C. E., Ph. D., 203 Washington St., Chicago, Ill. (50).
- Hemmeter, John C., M. D., Prof. in Medical Department, Univ. of Maryland, 1734 Linden Ave., Baltimore, Md. (51). **K**
- Henderson, Joseph J., 689 10th St., Brooklyn, N. Y. (51).
- Henderson, Junius, County Judge, Boulder, Colo. (50).
- *Henderson, William Edward, Ph. D., Ohio State University, Columbus, Ohio. (50). 1901. **C**
- Hendricks, Henry H., 49 Cliff St., New York, N. Y. (30).
- Henius, Max, Ph. D., 294 South Water St., Chicago, Ill. (52). **K**
- Hennen, Ray Vernon, C. E., L. B. 448, Morgantown, W. Va. (50). **D**
- Henrich, Carl, Mining Engineer, Room 1014, No. 25 Broad St., New York, N. Y. (50). **A E I**
- *Henry, Alfred J., U. S. Weather Bureau, Washington, D. C. (49). 1901. **B**
- Henry, Charles C., M. D., 56 Clark St., Brooklyn, N. Y. (43).
- Hensel, Samuel Theodore, 801 E. Colfax Ave., Denver, Colo. (50). **C G**
- Henzey, Sam'l Alexander, Pres. of Raleigh and Western Railway Co., 52 Broadway, New York, N. Y. (51).
- Herbert, Arthur P., Engineer and Supt. Colima Division, Compania Constructora Nacional Mexicana, Colima, Colima, Mex. (51). **D**
- Hering, Daniel Webster, Professor of Physics, New York University, University Heights, New York, N. Y. (50). **B D**
- *Hering, Rudolph, 170 Broadway, New York, N. Y. (33). 1885. **D E I**
- Herr, Hiero B., Civil and Mining Engineer, Summit, N. J. (50). **E**
- *Herrick, C. Judson, Denison University, Granville, Ohio. (49). 1901. **F**
- Herrick, Francis Hobart, Professor Biology, Adelbert College, Cleveland, Ohio. (52). **F**
- Herrick, Glenn W., Professor of Biology, A. and M. College, Agricultural College, Miss. (50). **F**
- HERRMAN, MRS. ESTHER, 59 West 56th St., New York, N. Y.
- *Herrmann, Richard, Sec'y Iowa Institute of Science and Arts, Dubuque, Iowa. (50). 1902. **C E**

MEMBERS AND FELLOWS.

- Herron, John Brown, S. Linden Ave., E. E., Pittsburg, Pa. (51). **I**
Herron, William Harrison, U. S. Geological Survey, Washington.
D. C. (52). **D E I**
- *Herter, Christian A., M. D., 819 Madison Ave., New York, N. Y.
(50). 1902. **K**
- *Herty, Charles Holmes, Ph. D., Ocilla, Ga. (42). 1895. **C**
- *Hervey, Rev. A. B., Bath, Me. (22). 1879. **F**
- Herzog, Felix Benedict, Ph. D., President Herzog Teleseme Co.,
51 West 24th St., New York, N. Y. (50). **D**
- Herzstein, M., M. D., 801 Sutter St., San Francisco, Cal. (52). **K**
- Hesse, Conrad E., U. S. Weather Bureau, Washington, D. C. (50).
A
- Heston, John W., President South Dakota Agricultural College,
Brookings, S. D. (50). **I**
- Hewett, Edgar L., President New Mexico Normal University, East
Las Vegas, N. M. (50). **H**
- Hewitt, Charles N., M. D., LL.D., Secretary State Board of Health,
Red Wing, Minn. (50). **K**
- HEXAMER, C. JOHN, C. E., 419 Walnut St., Philadelphia, Pa. (33).
B C
- Heyer, Wm. D., 523 South Broad St., Elizabeth, N. J. (33). **B D**
- Hice, Richard R., Beaver, Pa. (51). **E**
- Hichborn, C. S., Secretary State Survey Commission, Augusta, Me.
(52). **I**
- Higdon, John Clark, 605 Union Trust Bldg., St. Louis, Mo. (50).
B D I
- Higgins, F. W., M. D., 20 Court St., Cortland, N. Y. (51). **K**
- Higgins, Lafayette, C. E., Prof. of Chemistry, West D. M. High
School, Des Moines, Iowa. (51). **C**
- Higginson, James J., 16 E. 41st St., New York, N. Y. (49).
- Higley, Hon. Warren, 68 West 40th St., New York, N. Y. (43).
- *Hilgard, Prof. E. W., Univ. of California, Berkeley, Cal. (11).
1874. **B C E**
- Hill, Bruce V., Grinnell, Iowa. (48). **B**
- Hill, Ebenezer, Treasurer, Norwalk Iron Works, South Norwalk,
Conn. (50). **D**
- Hill, Edwin A., Assistant Examiner, U. S. Patent Office, Wash-
ington, D. C. (52). **D**
- *Hill, George A., U. S. Naval Observatory, Washington, D. C.
(47). 1900. **A**
- *Hill, John Edward, Prof. of Civil Engineering, Brown Univer-
sity, Providence, R. I. (44). 1897. **D**
- *Hill, Robert Thomas, U. S. Geol. Survey, Washington, D. C.
(36). 1889. **E**
- *Hillebrand, William F., U. S. Geological Survey, Washington.
D. C. (51). 1903. **E**

MEMBERS AND FELLOWS.

Hillig, Frederick J., S. J., St. Johns College, Toledo, Ohio. (50).
Hillkowitz, Wm., M. D., 704 Race St., Cincinnati, Ohio. (50).

C F I K

*Hillyer, Homer W., Ph. D., Chemical Laboratory, Univ. of Wisconsin, Madison, Wis. (42). 1896. **C**

Hillyer, William Eldridge, 1365 Whitney Ave., N.W., Washington, D. C. (52).

Hilton, William A., 435 Penn Ave., Waverly, N. Y. (49). **F**

*Himes, Prof. Charles F., Carlisle, Pa. (29). 1882. **B C**

Himowich, Adolph A., M. D., 130 Henry St., New York, N. Y. (51). **K**

Hindshaw, Henry Havelock, Assistant in Geology, State Museum, Albany, N. Y. (52). **E**

Hine, James S., Ohio State Univ., Columbus, Ohio. (48). **F**

*Hinrichs, Dr. Gustavus, 4106 Shenandoah Ave., St. Louis, Mo. (17). 1874. **B C**

Hinton, John H., M. D., 41 W. 32d St., New York, N. Y. (29). **F H**

Hirschberg, Michael H., Judge of Supreme Court, State of New York, Newburgh, N. Y. (50). **I**

Hirschfelder, Jos. Oakland, M. D., Professor of Cl. Med., Cooper Medical College, 1392 Geary St., San Francisco, Cal. (51). **K**

*Hiss, P. Hanson, M. D., 437 West 59th St., New York, N. Y. (49). 1903. **K**

*Hitchcock, Albert Spear, Div. Agrostology, U. S. Dept. Agriculture, Washington, D. C. (39). 1892. **G**

Hitchcock, Miss Caroline Judson, Teacher in High School, Meriden, Conn. (50). **B E**

*HITCHCOCK, CHARLES H., LL.D., Hanover, N. H. (11). 1874. **E**

Hitchcock, Embury A., 380 W. Eighth Ave., Columbus, Ohio. (48).

D

Hitchcock, Miss Fanny R. M., 4038 Walnut St., Philadelphia, Pa. (35). **F**

*Hitchcock, Frank H., Chief Clerk, U. S. Dept. of Commerce, Washington, D. C. (49). 1901. **I**

*Hitchcock, Romyne, Room 1804, 20 Broad St., New York, N. Y. (47). 1898. **B C**

Hitz, John, Supt. of Volta Bureau, 1601-3 Thirty-fifth St., Washington, D. C. (52).

*Hoadley, George A., Swarthmore College, Swarthmore, Pa. (40). 1900. **B**

Hoagland, Henry Williamson, M. D., 327 N. Nevada Ave., Colorado Springs, Colo. (51). **F K**

Hobbs, Prof. Perry L., Western Reserve Medical College, Cleveland, Ohio. (41). **C**

*Hobbs, William Herbert, Ph. D., Madison, Wis. (41). 1893. **E**

Hobby, C. M., M. D., Iowa City, Iowa. (51). **K**

MEMBERS AND FELLOWS.

- Hodge, Frederick Humbert, Instructor in Mathematics, Clark University, Worcester, Mass. (50). **A**
- Hodge, Frederick Webb, Smithsonian Institution, Washington, D. C. (52).
- Hodge, James M., Big Stone Gap, Va. (29). **D E**
- Hodges, Miss Julia, 217 W. 44th St., New York, N. Y. (36). **E F H**
- Hodges, Thomas Edward, Professor of Physics, W. Va. State University, Morgantown, W. Va. (50). **B**
- *Hodgkins, Prof. H. L., Columbian University, Washington, D. C. (40). 1896. **A B**
- Hodgkins, William Candler, Coast and Geodetic Survey, Washington, D. C. (52). **D**
- HOE, MRS. R., JR., 11 E. 36th St., New York, N. Y. (36).
- Hoe, Mrs. Richard M., 11 E. 71st St., New York, N. Y. (36).
- Hoffman, Christian B., Enterprise, Kansas. (50). **D H**
- Hoffman, Frank Sargent, Professor of Philosophy, Union University, Schenectady, N. Y. (52). **H**
- *HOFFMANN, DR. FRIEDRICH, Charlottenburg, Kant St. 125, Berlin, Germany. (28). 1881. **C F**
- Hoffman, Samuel V., Morristown, N. J. (52). **A D**
- Hogan, Mrs. Louise E., Box 205, Washington, D. C. (52).
- Hogeboom, Miss Ellen C., Shelbyville, Ky. (46). **C**
- Holbrook, Henry R., Civil Engineer, Pueblo, Colo. (51). **D**
- Holbrook, Percy, Genl. Mgr. Weber Ry. Joint Mfg. Co., 145 W 69th St., New York, N. Y. (51). **D**
- Holden, Edwin R., 13 E. 79th St., New York, N. Y. (49).
- HOLDEN, MRS. L. E., The Hollenden, Cleveland, Ohio. (35).
- Holferty, George M., Botany Building, University of Chicago, Chicago, Ill. (50). **G**
- *Holland, W. J., D. D., LL.D., Director Carnegie Museum, Pittsburgh, Pa. (37). 1896. **F**
- *Hollick, Arthur, N. Y. Botanical Garden, Bronx Park, New York, N. Y. (31). 1892. **E G**
- Hollinshead, Warren H., Vanderbilt University, Nashville, Tenn. (37).
- Hollister, John James, Mining Engineer, Gaviota, Santa Barbara Co., Cal. (50). **E**
- Holmes, A. M., M. D., Jackson Block, Denver, Colo. (50). **F K**
- Holmes, Dr. Christian R., 8-10 East Eighth St., Cincinnati, Ohio. (48).
- Holmes, Frederic Harper, Instructor in Physics, Geography and Mathematics, State Normal School, Hyannis, Mass. (50). **A B E**
- *Holmes, Prof. Joseph A., State Geologist, Chapel Hill, N. C. (33). 1887. **E F**
- Holmes, Miss Mary S., 1331 Twelfth St., Philadelphia, Pa. (50). **E**

MEMBERS AND FELLOWS.

- Holmes, Morrison A., Principal Avery Normal Institute, Charleston, S. C. (52).
- Holmes, S. J., Ph. D., University of Michigan, Ann Arbor, Mich. (51). **F**
- *Holmes, Wm. H., U. S. National Museum, Washington, D. C. (30). 1883. **H**
- Holstein, George Wolf, Wolfe City, Texas. (28). **E H**
- Holt, Chas., 255 W. 45th St., New York, N. Y. (51).
- Holt, Henry, 29 W. 23d St., New York, N. Y. (29).
- Holt, H. P. R., Cosmos Club, Washington, D. C. (52).
- Holt, Herbert S., President, Montreal Light, Heat and Power Co., Montreal, Can. (51). **D**
- Holton, Henry D., M. D., Brattleboro, Vt. (44). **I**
- Homans, Amy Morris, Director of the Boston Normal School of Gymnastics, 97 Huntington Ave., Boston, Mass. (52).
- Homburg, Frederick, Teacher of Chemistry, Woodward High School, Cincinnati, Ohio. (51). **C**
- Homer, Charles S., Valentine & Co., 245 Broadway, New York, N. Y. (29).
- Hoobler, Bert Raymond, Cornell University, Ithaca, N. Y. (50). **F G**
- Hood, Ozni P., Professor of Mechanical and Electrical Engineering, School of Mines, Houghton, Mich. (52). **D**
- Hood, William, 512 Van Ness Ave., San Francisco, Cal. (35). **D**
- Hooker, Davenport, 341 Adelphi St., Brooklyn, N. Y. (52). **F**
- Hooker, Donald R., Chemist, 1707 Fairmont Ave., Baltimore, Md. (50). **C K**
- Hooker, Prof. Henrietta E., Mt. Holyoke College, South Hadley, Mass. (45). **G**
- Hooker, John D., 130 S. Los Angeles St., Los Angeles, Cal. (51). **A**
- Hooper, Prof. Franklin W., Curator Brooklyn Institute, Brooklyn, N. Y. (43).
- Hoopes, H. E., Media, Pa. (52). **H**
- Hoose, James H., Professor of Philosophy, Univ. of Southern California, Los Angeles, Cal. (52). **I**
- Hoover, Herbert C., care Bewick, Moreing & Co., Broad St. House, New Broad St., London, England. (51). **E**
- Hoover, Mrs. Lou Henry, care Bewick, Moreing & Co., Broad St. House, New Broad St., London, England. (51). **E**
- Hoover, William, Athens, Ohio. (49).
- Hopeman, H., M. D., Minden, Neb. (51). **K**
- Hopkins, Albert Lloyd, 2904 West Ave., Newport News, Va. (51).
- Hopkins, Anderson Hoyt, Assistant Librarian of John Crerar Library, Chicago, Ill. (52).
- *Hopkins, A. D., Ph. D., U. S. Department Agriculture, Washington, D. C. (42). 1899. **F**

MEMBERS AND FELLOWS.

- *Hopkins, Prof. Arthur John, Amherst College, Amherst, Mass. (44). 1900. **C**
Hopkins, George B., 52 Broadway, New York, N. Y. (50).
- *Hopkins, Grant S., Cornell University, Ithaca, N. Y. (41). 1900. **F**
- *Hopkins, Nevil Monroe, Asst. Professor of Chemistry, Columbian University, Washington, D. C. (48). 1901. **C D**
- *Hopkins, Thomas Cramer, Syracuse University, Syracuse, N. Y. (38). 1898. **E**
Hormell, Prof. William G., Ohio Wesleyan Univ., Delaware, Ohio. (48). **B**
- Hornung, Christian, Professor of Mathematics and Astronomy, Heidelberg University, Tiffin, Ohio. (50). **A D**
- *Horsford, Miss Cornelia, 27 Craigie St., Cambridge, Mass. (46). 1897. **H**
Hortvet, Julius, State Chemist, 313 16th Ave., S.E., Minneapolis, Minn. (50). **C**
- Hoskins, William, La Grange, Ill. (34). **C**
- Hosmer, Sidney, E. E., Boston Electric Light Co., 3 Head Place, Boston, Mass. (50). **D**
- Hotchkiss, Elmer Aro, President Champaign County Board of School Examiners, Mechanicsburg, Ohio. (52). **B**
- Hotchkiss, Henry Stuart, 55 Hillhouse Ave., New Haven, Conn. (50). **E I**
- *Hough, Prof. G. W., Northwestern University, Evanston, Ill. (15). 1874. **A B D**
- *Hough, Theodore, Ph. D., Assistant Professor of Biology, Mass. Institute of Technology, Boston, Mass. (51). 1903. **K**
- *Hough, Walter, U. S. National Museum, Washington, D. C. (38). 1890.
Houghton, E. Mark, 350 Penn Ave., Detroit, Mich. (52). **K**
- Houghton, Frederick, Public School, No. 7, Buffalo, N. Y. (51). **H**
- Houk, Mrs. Eliza P. T., P. O. Box 94, Dayton, Ohio. (48).
- Houser, Gilbert L., Ph. D., Professor Animal Morphology, University of Iowa, Iowa City, Iowa. (50). **F K**
- Houston, David Walker, M. D., 18 Second St., Troy, N. Y. (51). **K**
- *Hovey, Edmund O., Amer. Mus. Nat. History, Central Park, New York, N. Y. (36). 1895. **C E**
- *Hovey, Rev. Horace C., 60 High St., Newburyport, Mass. (29). 1883. **E H**
Howard, Charles P., 116 Farmington Ave., Hartford, Conn. (51).
- *Howard, Curtis C., 97 Jefferson Ave., Columbus, Ohio. (38). 1892. **C**
- *Howard, Leland O., Ph. D., Cosmos Club, Washington, D. C. (37). 1889. **F**
Howard, Mrs. Leland O., 2026 Hillyer Place, N.W., Washington, D. C. (49). **H**

MEMBERS AND FELLOWS.

- Howard, Orson, M. D., Professor of Biology, University of Utah, Salt Lake City, Utah. (50). **F K**
- *Howard, S. Francis, Professor of Chemistry, Mass. Agricultural College, Amherst, Mass. (50). 1901. **C**
- Howard, Wm. Lee, M. D., 1126 N. Calvert St., Baltimore, Md. (51). **K**
- *Howe, Charles S., Case School of Applied Science, Cleveland, Ohio. (34). 1891. **A**
- Howe, Ernest, Ph. D., U. S. Geological Survey, Washington, D. C. (52). **E**
- *Howe, Henry M., Professor of Metallurgy, Columbia University, New York, N. Y. (50). 1901. **D**
- *Howe, Herbert Alonzo, Director of the Chamberlin Observatory, University of Denver, University Park, Colo. (50). 1901. **A**
- *Howe, Prof. Jas. Lewis, Washington and Lee University, Lexington, Va. (36). 1888. **C**
- Howe, J. Morgan, M. D., 12 West 46th St., New York, N. Y. (50),
- *Howe, Marshall A., New York Botanical Garden, Bronx Park, New York, N. Y. (49). 1903. **G**
- *Howell, Edwin E., 612 17th St., N.W., Washington, D. C. (25). 1891. **E**
- Howell, John W., Ballantine Parkway, Newark, N. J. (50).
- *Howell, William H., M. D., Professor of Physiology, Johns Hopkins University, Baltimore, Md. (50). 1901. **F K**
- Howell, Wilson Stout, Sec'y Association of Edison Illuminating Companies, 14 Jay St., New York, N. Y. (50). **D**
- Hower, Harry Sloan, Instructor in Physics, Case School of Applied Science, Cleveland, Ohio. (50). **B**
- Howerth, Ira Woods, Instructor in Sociology, University of Chicago, Chicago, Ill. (50). **I**
- Howland, Howard Newell, 5451 Drexel Ave., Chicago, Ill. (50). **F**
- Hoyt, Adrian Hazen, M. D., Manager Whitney Electric Co., Penacook, N. H. (52). **D**
- Hoyt, Olive Sawyer, Kobe College, Kobe, Japan. (52). **C**
- *Hrdlicka, Alès, M. D., Amer. Mus. Nat. Hist., 77th St. and Central Park, West, New York, N. Y. (46). 1897. **H**
- Hubbard, Walter C., Coffee Exchange Bldg., New York, N. Y. (49).
- *Huber, G. Carl, M. D., Junior Professor of Anatomy and Director of Histological Laboratory, University of Michigan, Ann Arbor, Mich. (50). 1901. **F K**
- Hubley, G. Wilbur, Electric Light Co., Louisville, Ky. (52). **D**
- Huddleston, John H., M. D., 126 West 85th St., New York, N. Y. (51). **K**
- *Hudson, George H., Vice Principal, Dept. Natural Science, State Normal and Training School, Plattsburgh, N. Y. (31). 1901. **F**

MEMBERS AND FELLOWS.

- Hughes, Charles Hamilton, M. D., President, Barnes Medical College, 3857 Olive St., St. Louis, Mo. (53). **K**
- Hulbert, C. E., Secretary, Department of Anthropology, La. Purchase Exposition, St. Louis, Mo. (53). **H**
- *Hull, Gordon Ferrie, Professor of Physics, Dartmouth College, Hanover, N. H. (50). 1903. **B**
- Hume, Alfred, C. E., University, Miss. (39). **A**
- Hume, Frank, 454 Penna. Ave., N.W., Washington, D. C. (52).
- Hummel, John A., Experiment Station, St. Anthony Park, Minn. (48).
- *Humphrey, Richard L., Testing Laboratory, City Hall, Philadelphia, Pa. (48). 1902. **D**
- Humphreys, Alex. C., M. E., C. E., 31 Nassau St., New York, N. Y. (49).
- Hungerford, W. S., care of W. Ames & Co., Jersey City, N. J. (43). **D**
- Hunsicker, George W., 141 N. 8th St., Allentown, Pa. (50). **C**
- Hunt, Chas. Wallace, Stapleton, N. Y. (51).
- Hunt, Mrs. Mary Hanchett, 23 Trull St., Boston, Mass. (52).
- *Hunter, Andrew Frederick, Barrie, Ontario, Can. (38). 1896. **B H I**
- Hunter, Chas. H., M. D., 13 Syndicate Block, Minneapolis, Minn. (51). **K**
- Hunter, George William, Jr., 2297 Loring Place, University Heights, New York, N. Y. (52). **F**
- *Hunter, Prof. Joseph Rufus, Richmond College, Richmond, Va. (45). 1899. **C**
- *Hunter, Samuel John, Associate Professor of Entomology, University of Kansas, Lawrence, Kansas. (50). 1902. **F**
- Hunter, Walter David, Special Agent, U. S. Department Agriculture, Washington, D. C. (50). **F**
- Huntington, Ellsworth, Highland St., Milton, Mass. (51).
- Huntington, Prof. G. S., Columbia University, New York, N. Y. (52).
- Hurd, E. O., Plainville, Ohio. (30). **E F**
- Hurst, Julius H., M. D., 269 Canner St., New Haven, Conn. (52). **K**
- Hutcheson, David, Library of Congress, Washington, D. C. (52). **H I**
- Hutchinson, Susan A., Librarian of the Museum of Brooklyn Institute of Arts and Sciences, Eastern Parkway, Brooklyn, N. Y. (52). **I**
- Huxley, Henry Minor, Revere Rubber Co., Chelsea, Mass. (48).
- Hyams, Miss Isabel F., 26 Wales St., Dorchester, Mass. (47). **C**
- Hyde, B. T. Babbitt, 20 W. 53d St. New York, N. Y. (43). **D**
- Hyde, Charles Gilman, Board of Public Works, Harrisburg, Pa. (47). **D**

MEMBERS AND FELLOWS.

Hyde, Clement C., 41 Willard St., Hartford, Conn. (52). **B C**
Hyde, Miss Edith E., U. S. Nat'l Museum, Washington, D. C. (50).

H I

Hyde, E. Francis, Hotel Netherland, New York, N. Y. (43). **A**
Hyde, Miss Elizabeth Mead, 210 E. 18th St., New York, N. Y. (49). **H**

*Hyde, E. W., Station D, Cincinnati, Ohio. (25). 1881. **A**
Hyde, Frederick E., M. D., 20 W. 53d St., New York, N. Y. (43).

E

Hyde, Frederick E., Jr., 20 W. 53d St., New York, N. Y. (43). **H**
Hyde, Henry St. J., 210 E. 18th St., New York, N. Y. (49).

*Hyde, John, Statistician U. S. Dept. Agriculture, Washington, D. C. (47). 1898. **E I**

*Iddings, Joseph P., Univ. of Chicago, Chicago, Ill. (31). 1884. **E**
Iden, Thomas M., Professor of Chemistry and Physics, State Normal School, Emporia, Kansas. (50). **B C F**

*ILES, GEORGE, 5 Brunswick St., Montreal, Can. (31). 1898. **I**

Ingham, Wm. A., 320 Walnut St., Philadelphia, Pa. (33). **E**

Ingram, Edward Lovering, C. E., Expert Aid, New York Navy Yard, New York, N. Y. (51). **A B C D**

Iorns, Martin J., Mount Vernon, Ia. (50). **C G**

*Irving, John D., 440 Seneca St., South Bethlehem, Pa. (51). 1903.

E

*Ives, Frederick E., 2750 N. 11th St., Philadelphia, Pa. (44). 1898.

B

*Jack, John G., Jamaica Plain, Mass. (31). 1890. **G**

Jack, Louis, 1533 Locust St., Philadelphia, Pa. (52). **K**

*Jackson, Prof. Charles L., Harvard University, Cambridge, Mass. (44). 1895. **C**

Jackson, John H., M. D., 155 Franklin St., Fall River, Mass. (51).

K

*Jackson, Dr. Robert T., 9 Fayerweather St., Cambridge, Mass. (37). 1890. **F**

Jackson, Victor H., M. D., D. D. S., 240 Lenox Ave., New York, N. Y. (51). **K**

Jacobs, Henry Barton, M. D., Instructor in Medicine, Johns Hopkins Medical School, Baltimore, Md. (50). **K**

Jacobs, Michael William, 222 Market St., Harrisburg, Pa. (50). **I**

*Jacobus, David S., Stevens Institute, Hoboken, N. J. (36). 1889.

A B D

*Jacoby, Harold, Columbia University, New York, N. Y. (38). 1891. **A**

*Jacoby, Henry S., Prof. of Bridge Engineering and Graphics, Cornell University, Ithaca, N. Y. (36). 1892. **D**

Jaffa, Myer Edward, Berkeley, Cal. (47).

James, Charles C., Dept. Agriculture, Toronto, Can. (46). **I**

MEMBERS AND FELLOWS.

- James, Mrs. Sarah S., 1517 O St., N.W., Washington, D. C. (49).
H I
- James, William, Professor of Philosophy, Harvard University,
 Cambridge, Mass. (52). **I**
- *Jaques, Capt. William H., 186 Devonshire St., Boston, Mass.
 (47). 1899. **D**
- Jarman, Joseph L., President and Prof. of Chemistry, State
 Female Normal School, Farmville, Va. (51). **C**
- Jarvis, Samuel M., 1 West 72d St., New York, N. Y. (50).
- *Jastrow, Dr. Joseph, Univ. of Wisconsin, Madison, Wis. (35). 1887.
F H
- *Jayne, Horace, 318 S. 19th St., Philadelphia, Pa. (29). 1884. **F H**
- Jefferis, Wm. W., 442 Central Park, West, New York, N. Y. (33). **E**
- Jefferson, J. P., Manufacturer, Warren, Pa. (51). **D I**
- Jefferson, Mark S. W., Professor of Geology, State Normal Col-
 lege, Ypsilanti, Mich. (52). **E**
- Jeffrey, Edward Charles, Ph. D., 21 Follen St., Cambridge, Mass.
 (52). **G**
- *Jeffries, B. Joy, M. D., 15 Chestnut St., Boston, Mass. (29). 1881.
F H
- Jelly, George Frederick, M. D., 69 Newbury St., Boston, Mass.
 (50). **F K**
- *Jenkins, Edw. H., Agricultural Station, New Haven, Conn. (33).
 1885. **C**
- Jenkins, J. F., M. D., 48 Chicago St., Tecumseh, Mich. (51). **K**
- Jenkins, Oliver Peebles, Professor of Physiology, Stanford Uni-
 versity, Cal. (52). **F K**
- *Jenks, Albert E., Bureau of Non-Christian Tribes, Manila, P. I.
 (50). 1902. **H**
- *Jenks, Elisha T., Middleboro, Mass. (22). 1874. **D**
- Jenks, Wm. H., Brookville, Pa. (38).
- Jenks, William Johnson, Electrical Engineer, 120 Broadway,
 New York, N. Y. (50). **B D**
- *Jenney, Walter Proctor, E. M., Ph. D., Consulting Geologist and
 Mining Engineer, Knutsford Hotel, Salt Lake City, Utah. (50).
 1903. **E**
- Jennings, Gainor, M. D., West Milton, Ohio. (51). **K**
- *Jennings, Walter L., Worcester Polytechnic Institute, Worcester,
 Mass. (45). 1898.
- Jepson, Wm., M. D., Sioux City, Ia. (51). **K**
- *Jesup, Morris K., 44 Pine St., New York, N. Y. (29). 1891. **I**
- Jewell, Lewis E., Johns Hopkins University, Baltimore, Md. (49).
- *Jewett, Prof. Frank Fanning, Oberlin College, Oberlin, Ohio. (47).
 1899. **C**
- Jewett, Geo. Franklin, M. D., Britton, S. Dak. (51). **K**

MEMBERS AND FELLOWS.

- Jewett, William Cornell, C. E., 541 Ridgeway Ave., Avondale, Cincinnati, Ohio. (52). **D**
- Johns, Carl, Professor of Natural History, Bethany College, Lindsborg, Kans. (50). **F**
- Johnson, Albert Lincoln, C. E., 606 Century Bldg., St. Louis, Mo. (51). **D**
- Johnson, Charles W., Ph. D., Box 114, University Station, Seattle, Wash. (52). **C**
- Johnson, Chas. Willison, Curator of Museum, Wagner Free Institute of Science, Philadelphia, Pa. (51).
- Johnson, Frank Edgar, 747 Warburton Ave., Yonkers, N. Y. (50).
- Johnson, Frank Seward, M. D., 2521 Prairie Ave., Chicago, Ill. (51). **K**
- Johnson, Miss Isabel Louise, 467 Mass. Ave., Station A, Boston, Mass. (47). **E**
- Johnson, John Benjamin, 708 East Colorado St., Pasadena, California. (51). **F**
- Johnson, Nels, Manistee, Mich. (41). **A B**
- *Johnson, Otis C., 730 Thayer St., Ann Arbor, Mich. (34). 1886. **C**
- Johnson, Thomas Carskadon, 375 Spruce St., Morgantown, West Virginia. (51). **G**
- *Johnson, Willis Grant, 52 Lafayette Place, New York, N. Y. (47). 1901. **F**
- Johnson, W. Smythe, Ph. D., Univ. of Arkansas, Fayetteville, Ark. (49). **H**
- Johnston, Arthur Weir, M. D., Madison Road, Cincinnati, Ohio. (52). **K**
- Johnston, Geo. Ben., M. D., 407 E. Grace St., Richmond, Va. (51). **K**
- Johnston, John Black, Professor of Zoology, Univ. of West Va., Morgantown, W. Va. (52). **F**
- Johnston, Thomas J., 66 Broadway, New York, N. Y. (50). **A B D**
- Johnston, William A., Prince Bay, Borough of Richmond, N. Y. (50). **C**
- Johnstone, Wm. Bard, 22 West 25th St., New York, N. Y. (50). **B**
- Johonnott, Edwin Sheldon, Ph. D., Associate Professor of Physics, Rose Polytechnic Institute, Terre Haute, Ind. (50). **B**
- Jones, Adam Leroy, Ph. D., Tutor in Philosophy, Columbia University, New York, N. Y. (52). **H I**
- Jones, Charles C., M. D., Galveston, Texas. (50). **K**
- Jones, Clement Ross, Professor Mechanical Engineering, West Virginia University, Morgantown, W. Va. (50). **D**
- Jones, Ernest S., Instructor in Biology, University of Virginia, Charlottesville, Va. (52). **F**
- *Jones, Frederick S., Professor of Physics, University of Minnesota, Minneapolis, Minn. (45). 1901. **B**

MEMBERS AND FELLOWS.

- Jones, Grinnell, Vanderbilt University, Nashville, Tenn. (52). **C**
- *Jones, Lewis Ralph, Professor of Botany, University of Vermont, Burlington, Vt. (41). 1894. **G**
- Jones, Lynds, M. Sc., Instructor in Zoology, Oberlin College, Oberlin, Ohio. (50). **F**
- *Jones, Prof. Marcus E., Salt Lake City, Utah. (40). 1893. **G**
- Jones, Philip Mills, M. D., 1710A Stockton St., San Francisco, Cal. (50).
- *Jordan, Prof. David Starr, President of Stanford University, Stanford University, Cal. (31). 1883. **F**
- *Jordan, Edwin Oakes, Ph. D., University of Chicago, Chicago, Ill. (50). 1901. **K**
- *Jordan, Whitman H., Director N. Y. Agric. Exper. Station, Geneva, N. Y. (45). 1902. **I**
- Juat, Francis, M. D., Aberdeen, N. C. (50). **F K**
- *Judd, Dr. Charles H., Yale University, New Haven, Conn. (49). 1901. **H I**
- *Julien, Alexis A., N. Y. Academy of Sciences, New York, N. Y. (24). 1875. **C E**
- Jungblut, Herman C., M. D., Tripoli, Iowa. (52). **K**
- Just, Jno. A., Chemist, Jefferson Ave. and Delano St., Pulaski, N. Y. (50). **C**
- Kahl, Paul Hugo Isidor, Carnegie Museum, Pittsburg, Pa. (50). **F**
- *Kahlenberg, Louis, Ph. D., Professor of Physical Chemistry, Univ. of Wisconsin, Madison, Wis. (46). 1898. **C**
- Kahn, Julius, 100 West 80th St., New York, N. Y. (50). **C**
- Kammerer, Jacob Andrae, 87 Jameson Ave., Toronto, Canada. (50). **C D**
- Kann, Myer M., Station B, Pittsburg, Pa. (51).
- Kasner, Edward, Ph. D., Tutor in Mathematics, Barnard College, Columbia University, New York, N. Y. (52). **A**
- Kaufmann, Paul, M. D., Professor of Bacteriology, Pathology, and Hygiene, State University, Columbia, Mo. (50). **K**
- Kauffman, William Albert, 73 Hooker Ave., Poughkeepsie, N. Y. (52).
- Kay, James I., 426 Diamond St., Pittsburg, Pa. (51). **D I**
- Kay, Thomas Wiles, M. D., 345 Wyoming Ave., Scranton, Pa. (51). **K**
- Kean, Mrs. Hamilton Fish, 25 East 37th St., New York, N. Y. (50).
- Keane, John J., Rt. Rev., Archbishop of Dubuque, Dubuque, Ia. (51).
- *Kearney, Thomas H., Jr., U. S. Dept. Agriculture, Washington, D. C. (47). 1902. **G**

MEMBERS AND FELLOWS.

- *Keasbey, Lindley Miller, Professor of Economics and Politics,
Bryn Mawr College, Bryn Mawr, Pa. (51). 1903. **H I**
- Keene, Geo. Fredk., M. D., Supt. State Hospital for the Insane,
Howard, R. I. (51). **K**
- *Keep, Wm. J., Detroit, Mich. (37). 1897.
- Keilholtz, Pierre Otis, Consulting Engineer, Continental Trust
Building, Baltimore, Md. (50). **D**
- Keim, Edward Tudor, E. E., Supt. Am. Dist. Tel. Co., 1421
Champa St., Denver, Colo. (50). **D E F**
- Keith, Prof. Marcia A., Mount Holyoke College, South Hadley,
Mass. (46). **B**
- Keller, Edward, Ph. D., Box 724, Baltimore, Md. (50). **C D**
- Keller, Emil E., P. O. Box 452, Pittsburg, Pa. (51).
- *Kellerman, Prof. William A., Ohio State University, Columbus,
Ohio. (41). 1893. **G**
- Kelley, Walter S., Mining Engineer, 1393 Golden Gate Ave., San
Francisco, Cal. (50). **D**
- Kellogg, John H., M. D., Battle Creek, Mich. (24). **F**
- *Kellogg, Vernon Lyman, Professor of Entomology, Stanford
University, California. (50). 1901. **F**
- Kelly, John F., Ph. D., Consulting Electrical Engineer, 284
W. Housatonic St., Pittsfield, Mass. (50). **D**
- Kelly, William, Mining Engineer, General Manager Penn. Iron
Mining Co., Vulcan, Mich. (50). **D E**
- Kelsey, Harlan Page, 1150 Tremont Building, Boston, Mass.
(47). **G**
- Kelsey, James A., Agric. Exper. Station, New Brunswick, N. J.
(49).
- Kemp, George T., Professor of Physiology, University of Illinois,
Champaign, Ill. (52). **K**
- *Kemp, James F., School of Mines, Columbia University, New
York, N. Y. (36). 1888. **F**
- Kendall, Arthur I., 106 Jackson Place, Baltimore, Md. (52).
- Kendall, Hugh F., Mining Engineer, Gust Carlson Exploration
Co., Hibbing, Minn. (50). **E**
- Kendall, William Converse, U. S. Fish Commission, Washington,
D. C. (52).
- *Kendrick, Arthur, Electrical Measuring Instruments, 45 Hunne-
well Ave. Newton, Mass. (45). 1897. **B**
- Kennedy, Frank Lowell, Instructor in Lawrence Scientific School,
Harvard University, Cambridge, Mass. (50).
- Kennedy, George Golding, M. D., Readville, Mass. (40). **F G**
- KENNEDY, HARRIS, 284 Warren St., Roxbury, Mass. (40). **E F**
- Kennedy, Orran W., General Superintendent, Frick Coke Co.,
Uniontown, Pa. (51). **E**

MEMBERS AND FELLOWS.

- *Kennelly, Arthur Edwin, Sc. D., Professor Electrical Engineering, Harvard University, Cambridge, Mass. (50). 1901. **D**
- Kent, James Martin, Instructor in Steam and Electricity, Manual Training High School, Kansas City, Mo. (50). **D E**
- Kent, Norton Adams, Ph. D., Professor Physics, Wabash College, Crawfordsville, Ind. (50). **A**
- *Kent, William, Professor of Mechanical Engineering, Syracuse University, Syracuse, N. Y. (26). 1881. **D I**
- Kenyon, Oscar Curtis, Teacher of Physics, High School, Syracuse, N. Y. (50). **B**
- Kepner, Harry V., Instructor in Chemistry, Manual Training High School, Denver, Colo. (50). **C**
- Keppel, F. P., Secretary of Columbia University, West 116th St., New York, N. Y. (51).
- Keppler, Rudolph, 28 W. 70th St., New York, N. Y. (49).
- Kern, Josiah Quincy, Ph. D., 507 6th St., N.W., Washington, D. C. (40). **I**
- Kern, Walter McCullough, Supt. Public Schools, Columbus, Neb. (50). **F G**
- Kerr, Abram Tucker, Assistant Professor of Anatomy, Cornell University, Ithaca, N. Y. (52). **K**
- Kerr, William Jasper, D. Sc., President of Agricultural College of Utah, Logan, Utah. (52). **A**
- *Kershner, Prof. Jefferson E., Lancaster, Pa. (29). 1883. **A B**
- Kesler, John Louis, Georgetown, Ky. (51). **F**
- Kester, Fred. Edward, Ohio State University, Columbus, Ohio. (48). **B**
- Ketchum, Alexander P., 32 Mt. Morris Park, W., New York, N. Y. (49).
- *Keyser, Cassius Jackson, Instructor in Mathematics, Columbia University, New York, N. Y. (50). 1901. **A**
- Kilgore, Benjamin Wesley, Director, N. C. Agric. Exper. Station, Raleigh, N. C. (52). **G**
- Kimball, Albert B., M. E., Central High School, Springfield, Mass. (47). **B**
- *Kimball, Arthur Lalanne, Professor of Physics, Amherst College, Amherst, Mass. (50). 1901. **B**
- Kimball, Edwin Boyce, Mining Engineer, Oroville, Cal. (50). **D**
- Kimball, James H., Observer U. S. Weather Bureau, Modena, Utah. (51). **A B**
- Kimball, S. I., Life Saving Service, U. S. Treasury Dept., Washington, D. C. (49). **I**
- Kindle, Dr. Edward M., Geologist, 109 Elm St., New Haven, Conn. (50). **E**
- *Kinealy, John H., 1108 Pemberton Bldg., Boston, Mass. (36). 1891. **D**

MEMBERS AND FELLOWS.

- *King, A. F. A., M. D., 1315 Mass. Ave., N.W., Washington, D. C. (29). 1900. **F H**
- King, Cyrus A., Ph. D., Instructor in Botany, University of Indiana, Bloomington, Ind. (50). **G**
- *King, F. H., 205 9th St., S.W., Washington, D. C. (32). 1892. **E F**
- King, George B., Lawrence, Mass. (47).
- King, Theo. Ingalls, U. S. Naval Observatory, Washington, D. C. (52). **A**
- *Kingsbury, Albert, Professor of Applied Mechanics, Worcester Polytechnic Institute, Worcester, Mass. (43). 1898. **D**
- *Kingsbury, Benj. F., Ithaca, N. Y. (45). 1899. **F**
- Kingsley, J. Sterling, Tufts College, Mass. (52).
- Kinner, Hugo, M. D., 1103 Rutger St., St. Louis, Mo. (21). **F H**
- Kinney, Charles Noyes, Professor of Chemistry, Drake University, Des Moines, Iowa. (50). **C**
- Kinney, Julius Eugene, M. D., 1427 Stout St., Denver, Colo. (51). **K**
- *Kinnicutt, Dr. Leonard P., 77 Elm St., Worcester, Mass. (28). 1883. **C**
- Kinraid, Thomas Burton, 38 Spring Park Avenue, Jamaica Plain, Mass. (47).
- Kinsler, John H., Dept. of Agriculture, Washington, D. C. (52). **G**
- *Kinsley, Carl, Quadrangle Club, Chicago, Ill. (47). 1903. **B**
- *Kinyoun, J. J., M. D., Glenolden, Pa. (51). 1903. **K**
- Kirk, Arthur, 910 Duquesne Way, Pittsburg, Pa. (50). **E I**
- Kirk, Elliott W., Wesley Hall, Nashville, Tenn. (50). **F G**
- Kirk, Hyland C., 211 6th St., N.E., Washington, D. C. (52). **I**
- Kirkpatrick, E. A., Fitchburg, Mass. (49). **H I**
- Kirkpartick, Samuel, M. D., Selma, Ala. (51). **K**
- Kirkwood, Joseph E., Instructor in Botany, Syracuse University, Syracuse, N. Y. (51). **G**
- *Kirschmann, A., Ph. D., Toronto University, Toronto, Can. (50). 1901. **H K**
- Kittredge, Miss H. A., 56 Prospect St., North Andover, Mass. (37). **F**
- Klebs, Arnold C., M. D., 706, 100 State St., Chicago, Ill. (51). **K**
- Klepetko, Frank, Consulting Engineer, 1011 Maritime Bldg., New York, N. Y. (50). **D**
- Kletzsch, Gustav A., M. D., 453 Cass St., Milwaukee, Wis. (51). **K**
- Klie, G. H. Chas., M. D., 5100 N. Broadway, St. Louis, Mo. (39). **C F**
- Klingensmith, Israel P., M. D., Blairsville, Pa. (51). **K**
- *Klotz, Otto Julius, 437 Albert St., Ottawa, Can. (38). 1889.

MEMBERS AND FELLOWS.

- Knapp, Alfred A., M. D., Brimfield, Peoria Co., Ill. (51). **K**
 Knapp, G. N., Stanton, Minn. (46). **G H**
 Knapp, Hon. Martin A., Chairman of the Interstate Commerce Commission, Washington, D. C. (52). **I**
 Knauff, Francis Henry, Oak Lane, Philadelphia, Pa. (51). **D**
 Knerr, Ellsworth B., Sc. D., Midland College, Atchison, Kas. (51).
 Knight, Prof. Charles M., 219 S. Union St., Akron, Ohio. (29). **B C**
 Knight, Wm. H., President So. California Academy of Sciences, 2 Bryson Block, Los Angeles, Cal. (51). **A**
 *Knipp, Charles Tobias, Indiana University, Bloomington, Ind. (46). 1900. **B**
 Knower, Henry McElderry, Ph. D., Johns Hopkins Medical School, Baltimore, Md. (52). **F**
 Knowles, Morris, Resident Engineer, Bureau of Filtration, 1017 Frick Bldg., Pittsburg, Pa. (51). **D**
 Knox, Francis H., Electrical Engineer, Spartanburg, S. C. (50). **D**
 Knox, Henry H., Mining Engineer, 110 East 23d St., New York, N. Y. (50). **D**
 Knox, Wilm, Society for Savings Building, Cleveland, Ohio. (38).
 *Kober, Geo. Martin, M. D., 1600 T St., N.W., Washington, D. C. (40). 1896. **H**
 Koenig, Adolph, M. D., Editor "Penna. Medical Journal," 122 Ninth St., Pittsburg, Pa. (50). **F G K**
 *Kofoid, Prof. Charles Atwood, University of California, Berkeley, Cal. (48). 1899. **F**
 Kolbenheyer, Fred'k, M. D., 2006 Lafayette Ave., St. Louis, Mo. (51). **K**
 Koues, Miss Elizabeth L., 282 W. 85th St., New York, N. Y. (41). **I**
 *KRAEMER, PROF. HENRY, 145 N. 10th St., Philadelphia, Pa. (47). 1901. **G**
 Kraus, Edward H., Syracuse University, Syracuse, N. Y. (50). **E**
 Krause, Otto H., Prospect Ave., Hackensack, N. J. (50).
 Krécsy, Prof. Béla, vi Bulyovsxy u. 22, Budapest, Hungary. (41). **C**
 *Kremers, Prof. Edward, University of Wisconsin, Madison, Wis. (47). 1901. **C**
 Kress, Palmer J., M. D., 636 Hamilton St., Allentown, Pa. (51). **K**
 Kretz, Prof. Charles Henry, Asst. Professor Mechanical Engineering, La. State University and A. and M. College, Baton Rouge, La. (50). **D**
 *Kroeber, A. L., Ph. D., Univ. of California, Berkeley, Cal. (47). 1901. **H**
 Krogstad, Henry, M. D., 1524 K St., N.W., Washington, D. C. (52). **K**

MEMBERS AND FELLOWS.

- Kuhne, F. W., 19 Court St., Fort Wayne, Ind. (38). **A F**
- Kummer, Frederic Arnold, Civil Engineer, President, United States Wood Preserving Co., 29 Broadway, New York, N. Y. (51). **D**
- Kunhardt, Wheaton B., 1 Broadway, New York, N. Y. (49).
- Kuntze, Dr. Otto, Villa Girola, San Remo, Italy. (49).
- *Kunz, G. F., care of Messrs. Tiffany & Co., Union Square, New York, N. Y. (29). 1883. **C E H**
- Kunz, George H., Mohegan, N. Y. (52).
- *Lachman, Arthur, Ph. D., 1909 Eddy St., San Francisco, Cal. (50). 1901. **C D**
- *Ladd, Prof. E. F., Agricultural College, Fargo, No. Dakota. (36). 1889. **C**
- Ladd, George Tallman, care Bass Foundry and Machine Co., Fort Wayne, Ind. (51).
- La Fetra, Linnaeus Edford, M. D., 58 West 58th St., New York, N. Y. (50). **F H K**
- *Lafamme, Prof. J. C. K., Laval University, Quebec, Can. (29). 1887. **B E**
- *La Flesche, Francis, 214 First St., S.E., Washington, D. C. (33). 1885. **H**
- *Lamb, Daniel S., M. D., 800 10th St., N.W., Washington, D. C. (40). 1894. **H**
- *Lambert, Preston A., 215 S. Center St., Bethlehem, Pa. (41). 1896. **A**
- Lampard, Henry, 102 Shuter St., Montreal, Can. (40). **C D E**
- Lanahan, Henry, Professor Physics and Civil Engineering, Maryland Agricultural College, College Park, Md. (52). **B D**
- Lancaster, Walter B., M. D., 101 Newbury St., Boston, Mass. (51). **K**
- Land, William Jesse Goad, Dept. Botany, Univ. of Chicago, Chicago, Ill. (52). **G**
- *Landes, Henry, State Geologist, Seattle, Wash. (51). 1903. **E**
- Landis, Edward Horace, Instructor in Physics and Chemistry, Central High School, Philadelphia, Pa. (52). **A B G**
- Landis, W. W., Dickinson College, Carlisle, Pa. (50).
- Landon, Francis G., Staatsburg-on-Hudson, N. Y. (50).
- *Landreth, Olin H., Union College, Schenectady, N. Y. (28). 1883. **D**
- *LANE, ALFRED C., State Geologist, Lansing, Mich. (50). 1902. **E**
- Lane, Horace Manley, M. D., Caixa 14 S. Paulo, Brazil, South America. (46).
- Lang, Prof. Henry R., Yale University, New Haven, Conn. (41). **H**
- Lange, J. D., 220 W. 79th St., New York, N. Y. (49).
- Lange, Philip A., Supt. Westinghouse Elec. and Mfg. Co., Pittsburgh, Pa. (50). **D**

MEMBERS AND FELLOWS.

- *Langenbeck, Karl, Elizabeth, N. J. (39). 1896. **C**
- *Langley, Prof. S. P., Smithsonian Institution, Washington, D. C. (18). 1874. **A B**
- Langmann, Gustav, M. D., 121 W. 57th St., New York, N. Y. (36).
- Langsdorf, Alexander Suss, Instructor in Physics and Electrical Engineering, Washington University, St. Louis, Mo. (50). **B D**
- Lanneau, John Francis, Professor of Applied Mathematics and Astronomy, Wake Forest College, Wake Forest, N. C. (50). **A B D**
- Lanphear, Burton S., Asst. Professor of Electrical Engineering, Iowa State College, Ames, Ia. (51). **D**
- Lansing, John Ernest, Instructor in Natural Sciences, Phillips Academy, Andover, Mass. (52). **B C E**
- *Lanza, Prof. Gaetano, Mass. Institute Technology, Boston, Mass. (29). 1882. **A B D**
- Laramy, Robert Edward, Teacher in Moravian School, 27 North New St., Bethlehem, Pa. (51). **E**
- Lare, H. S. P., M. D., 3452 Park Ave., St. Louis, Mo. (49).
- *LARKIN, EDGAR L., Director of Lowe Observatory, Echo Mountain, Cal. (51). 1903. **A**
- La Rue, Wm. Gordon, North Freedom, Wis. (50). **D E**
- Lathbury, B. Brentnall, C. E., Consulting Chemist, 1619 Filbert St., Philadelphia, Pa. (51). **D**
- Latimer, Thos. S., M. D., 211 W. Monument St., Baltimore, Md. (50). **F H K**
- *Lattimore, Prof. S. A., University of Rochester, Rochester, N. Y. (15). 1874. **C**
- Lauder, George, 7403 Penn Avenue, Pittsburg, Pa. (50).
- *Laudy, Louis H., Ph. D., School of Mines, Columbia University, New York, N. Y. (28). 1890. **C**
- Lauman, George Nieman, Instructor in Horticulture, Cornell University, Ithaca, N. Y. (50). **G**
- Law, Benedict W., 693 Lafayette Ave., Brooklyn, N. Y. (45). **E**
- Lawbaugh, Elmer Arthur, Oregonian Building, Portland, Oregon. (52). **K**
- Lawrance, J. P. S., Past Assistant Engineer U. S. N., Navy Dept., Washington, D. C. (35). **D**
- Lawrence, A. E., 53 Devonshire St., Boston, Mass. (49).
- Lawrence, Florus F., M. D., Chief of Staff and Surgeon, Lawrence Hospital for Women, 423 East Town St., Columbus, Ohio. (53). **K**
- Lawrence, Harry E., Univ. of Rochester, Rochester, N. Y. (44). **B**
- Lawrence, James W., Professor of Mechanical Engineering, Agricultural College, Fort Collins, Colo. (50). **D**
- Laws, Frank Arthur, Mass. Institute Technology, Boston, Mass. (47).

MEMBERS AND FELLOWS.

- Laws, Samuel Spahr, 1733 Q St., N.W., Washington, D. C. (52).
H
- *Lawson, Andrew C., Professor of Geology and Mineralogy, University of California, Berkeley, Cal. (50). 1901. **E**
- Lay, Henry Champlin, Civil and Mining Engineer and Geologist, U. S. Deputy Mineral Surveyor, Telluride, Colo. (51). **D E**
- Lazell, Ellis W., Ph. D., 1619 Filbert St., Philadelphia, Pa. (51). **C**
- *Lazenby, W. R., Columbus, Ohio. (30). 1882. **B I**
- *Leach, Miss Mary F., 74 Pitcher St., Detroit, Mich. (44). 1896. **C**
- *Leaming, Edward, 437 West 59th St., New York, N. Y. (50). 1901. **C**
- Leathers, W. S., Professor of Biology, University of Mississippi, University P. O., Miss. (50). **F**
- Leavitt, Frank M., Mechanical Engineer, 258 Broadway, New York, N. Y. (51). **D**
- *Le Baron, John Francis, Civil and Mining Engineer, 1329 Williamson Bldg., Cleveland, Ohio. (51). 1903. **E**
- Le Boutillier, Roberts, E. Washington Avenue, Germantown, Philadelphia, Pa. (47). **G**
- *Le Brun, Mrs. Michel M., 8 Mountain Ave., S., Montclair, N. J. (35). 1892. **F**
- Le Conte, Louis Julian, Civil Engineer, P. O. Box 482, Oakland, Cal. (51). **D**
- Le Conte, Robert Grier, M. D., 1625 Spruce St., Philadelphia, Pa. (51). **K**
- *Ledoux, Albert R., Ph. D., 99 John St., New York, N. Y. (26). 1881. **C**
- Lee, Benjamin, M. D., Secretary State Board of Health, 1420 Chestnut St., Philadelphia, Pa. (51). **K**
- Lee, Francis Valentine T., Electrical Engineer, 69-75 New Montgomery St., San Francisco, Cal. (50). **D**
- *Lee, Frederic S., Adjunct Professor of Physiology, Columbia University, New York, N. Y. (49). 1901. **K**
- Lee, Leslie A., Professor of Biology, Bowdoin College, Brunswick, Me. (52). **F**
- Lee, Waldemar, 4620 Wayne St., Philadelphia, Pa. (50).
- Lee, William George, Harvard Medical School, Boston, Mass. (50). **H K**
- *Lee, Prof. Willis Thomas, U. S. Geological Survey, Washington, D. C. (47). 1902. **E F**
- Leeds, Morris E., 3221 North 17th St., Philadelphia, Pa. (50). **D**
- *Lefavour, Prof. Henry, 3 Bremmer St., Boston, Mass. (42). 1894.
- Le Grand, Leroy, M. D., Graham, Texas. (50). **F K**
- *Lehmann, G. W., Ph. D., City Hall Annex, Baltimore, Md. (30). 1885. **B C**

MEMBERS AND FELLOWS.

- Lehmann, Leslie P., 32 South St., Baltimore, Md. (52).
 Leidy, Joseph, Jr., M. D., 1319 Locust St., Philadelphia, Pa. (51). **K**
 Leisen, Theo. Alfred, Civil Engineer, Wilmington, Del. (51).
B C D G
 Leiter, L. Z., Dupont Circle, Washington, D. C. (40).
 Lemley, C. McC., Asst. Engineer, B. & O. R.R. Co., Philippi, W. Va. (51). **D**
 Lemon, James S., Ph. D., 31 Park St., Gardner, Mass. (51). **I K**
 Lemp, William J., cor. Cherokee St. and 2d Carondelet Avenue, St. Louis, Mo. (27).
 Lender, Mrs. Julia A., 2201 Lincoln Ave., Denver, Colo. (50). **A B**
 Lengfeld, Felix, Ph. D., Consulting and Manufacturing Chemist, 202 Stockton St., San Francisco, Cal. (51). **C**
 Lenher, Victor, Ph. D., Assistant Professor of Chemistry, Univ. of Wisconsin, Madison, Wis. (52). **C**
 *Lennon, William H., Brockport, N. Y. (31). 1894. **C G**
 Leonard, Chas. Lester, M. D., 112 S. 20th St., Philadelphia, Pa. (51). **K**
 Leonard, John William, Editor of "Who's Who in America," Wheaton, Ill. (50). **I**
 Leonard, Percy Allan, Editor of "Ores and Metals," P. O. Box 364, Denver, Colo. (50). **E**
 Leslie, Miss Augusta, Newburgh, N. Y. (50). **I**
 Letson, Miss Elizabeth J., 366 Mass. Ave., Buffalo, N. Y. (47).
 Levene, Dr. P. A., 1 Madison Ave., New York, N. Y. (53). **K**
 *Leverett, Frank, Ann Arbor, Mich. (37). 1891. **E**
 Levine, Edmund J., The Fiberloid Co., 638 Broadway, New York, N. Y. (49).
 LEWIS, CLARENCE MCKENZIE, care Wm. Salomon & Co., 25 Broad St., New York, N. Y. (47). **D**
 Lewis, George Smith, 746 State St., Springfield, Mass. (44). **G**
 Lewis, Howard W., Banker, 1928 Spruce St., Philadelphia, Pa. (51). **I**
 *Lewis, Joseph Volney, Professor of Geology, Clemson College, S. C. (45). 1900. **C E**
 Lewis, Wilfred, Pres. The Tabor Mfg. Co., 5901 Drexel Road, Philadelphia, Pa. (51). **D**
 *Libbey, Prof. William, Princeton, N. J. (29). 1887. **E F**
 Lichthardt, G., Jr., 18th and M Sts., Sacramento, Cal. (50). **C**
 Lichty, Daniel, M. D., Masonic Temple, Rockford, Ill. (52). **K**
 Lightfoot, Thos. Montgomery, Asst. Prof. of Physical Science, Central High School, Philadelphia, Pa. (51). **G**
 *Lillie, Frank R., Professor of Zoology, University of Chicago, Chicago, Ill. (50). 1901. **F**

MEMBERS AND FELLOWS.

- Lincoln, Paul Martyn, Electrical Engineer, Pittsburg, Pa. (50). **D**
- *Lindenköhl, Adolphus, U. S. C. and G. Survey, Washington, D. C. (40). 1898. **E**
- Lindenköhl, Henry, U. S. C. and G. Survey, Washington, D. C. (47).
- *Lindenthal, Gustav, C. E., 45 Cedar St., New York, N. Y. (37.) 1891. **I**
- Linder, Oliver A., 35 Clark St., Chicago, Ill. (49).
- Lindgren, Waldemar, U. S. Geological Survey, Washington, D. C. (52). **E**
- Lindley, Ernest H., Professor Psychology, University of Indiana, Richmond, Ind. (52). **K**
- Lindsay, Alexander M., Rochester, N. Y. (41).
- Lindsey, Edward, Warren, Pa. (48). **H I**
- Linford, James Henry, President of the Brigham Young College, Logan, Utah. (52). **F**
- *Ling, Charles Joseph, Instructor in Physics, Manual Training High School, Denver, Colo. (50). 1901. **A B**
- Ling, George Herbert, Ph. D., Tutor in Mathematics, Columbia University, New York, N. Y. (52). **A**
- Link, Theodore Carl, Carleton Bldg., St. Louis, Mo. (51). **I**
- *Linn, Alvin Frank, Ph. D., Professor of Chemistry, Wittenberg College, Springfield, Ohio. (50). 1901. **C**
- Linn, George A., M. D., Monongahela, Pa. (51). **K**
- Linton, Edwin, Biological Laboratory, Washington and Jefferson College, Washington, Pa. (51). **F**
- Linville, Henry R., 509 West 112th St., New York, N. Y. (49).
- Lion, Léon Elie, C. E., Assistant on U. S. Engineer Corps, 1010 Burgundy St., New Orleans, La. (51). **D**
- Litchfield, Lawrence, M. D., 5431 Fifth Ave., Pittsburg, Pa. (51). **K**
- *Littell, Frank B., U. S. Naval Observatory, Washington, D. C. (49). 1903. **A**
- Little, C. A., Analyst at Lorain Steel Works, Box 517, Elyria, Ohio. (50). **C**
- Little, Henry P., Superintendent of Union Schools, Momence, Ill. (50). **B**
- Littlehales, G. W., U. S. Hydrographic Office, Washington, D. C. (52). **A B D E**
- Livermore, Mrs. M. A. C., 59 Brewster St., Cambridge, Mass. (29). **F**
- Livingston, Burton Edward, Ph. D., N. Y. Botanical Garden, Bronx Park, New York, N. Y. (53). **G**
- Lloyd, Andrew J., 310 Boylston St., Boston, Mass. (47). **B H**
- *Lloyd, Francis E., Teachers' College, Columbia University, New York, N. Y. (48). 1901. **G**

MEMBERS AND FELLOWS.

- *Lloyd, John Uri, Court and Plum Sts., Cincinnati, Ohio. (38).
1890. **C F**
- Lloyd, Mrs. Mary Elizabeth, Teachers' College, Columbia University, New York, N. Y. (51). **G**
- Lloyd, Morton Githens, Ph. D., National Bureau of Standards, Washington, D. C. (52). **B**
- Lloyd, Thomas Mortimer, M. D., 125 Pierrepont St., Brooklyn, N. Y. (51). **K**
- Lobenstine, William C., 245 Central Park, W., New York, N. Y. (49).
- Lochhead, William, Professor of Biology, Ontario Agricultural College, Guelph, Ontario, Can. (51). **F**
- Lockwood, Cornelius Wygant, Teacher of Science, Newburgh Academy, Newburgh, N. Y. (50). **B E**
- Lockwood, Edwin Hoyt, Asst. Prof. Mechanical Engineering, Yale University, New Haven, Conn. (50). **D**
- Loeb, Leo, M. D., Pathological Lab., McGill Univ., Montreal, Can. (51). **K**
- *Loeb, Morris, Ph. D., 118 W. 72d St., New York, N. Y. (36). 1889.
C
- *Loew, Dr. Oscar, Komaba, Tokyo, Japan. (49). 1900. **G**
- Loewy, Benno, 206 and 208 Broadway, New York, N. Y. (41).
- Logan, F. G., 2919 Prairie Ave., Chicago, Ill. (42). **H**
- LOGAN, WALTER S., 27 William St., New York, N. Y. (36).
- Lomb, Adolph, P. O. Drawer 1033, Rochester, N. Y. (41).
- Lomb, Henry, P. O. Drawer 1033, Rochester, N. Y. (41).
- Lomb, Henry C., P. O. Drawer 1033, Rochester, N. Y. (43).
- *Long, Prof. John H., 2421 Dearborn St., Chicago, Ill. (41). 1895.
C
- Long, William Henry, Jr., Denton, Texas. (50).
- *Longden, A. C., Ph. D., Professor of Physics, Knox College, Galesburg, Ill. (49). 1901. **B**
- Loomis, Frederick B., Ph. D., Assistant in Zoology, Amherst College, Amherst, Mass. (50). **F**
- *LOUBAT, LE DUC DE, 47 rue Dumont d'Urville, Paris, France. (46). 1897. **H**
- *Loud, Frank H., Colorado Springs, Colo. (29). 1890. **A B**
- Louderback, George Davis, Professor of Geology, Nevada State University, Reno, Nev. (50). **E**
- *Lough, J. E., New York University, Washington Square, New York, N. Y. (50). 1901. **I**
- *Loughridge, Dr. R. H., Univ. of California, Berkeley, Cal. (21). 1874. **C E**
- Lounsbury, Charles P., Government Entomologist, Dept. of Agriculture, Cape Town, South Africa. (52). **F**

MEMBERS AND FELLOWS.

- *Love, Edward G., 80 E. 55th St., New York, N. Y. (24). 1882. **C**
 Lovejoy, J. R., Genl. Elec. Co., Schenectady, N. Y. (50). **D**
 LOVELAND, HORACE HALL, M. D., Michigamme, Mich. (51). **K**
- *Lovett, Edgar Odell, Professor of Mathematics, Princeton University, Princeton, N. J. (51). 1902. **A**
 Lovett, Miss Mary, 293 Golden Hill, Bridgeport, Conn. (52). **F G**
 Low, A. A., Columbia Heights, Brooklyn, N. Y. (43). **A**
 Low, Clarence F., Liverpool, London, Globe Bldg., New Orleans, La. (52). **I**
- *Low, Seth, Mayor of City of New York, New York, N. Y. (29). 1890.
 Lowber, Rev. James William, Ph. D., 113 East 18th St., Austin, Texas. (50). **H I**
- Lowe, Houston, Dayton, Ohio. (52). **G**
- *Lowell, Percival, 53 State St., Boston, Mass. (36). 1896. **A**
 Lowell, Russell C., 167 Ohio Ave., Providence, R. I. (51).
 Lucas, Anthony F., Mining Engineer, 1406 16th St. N.W., Washington, D. C. (50). **D E**
- Luckey, John Eddy, M. D., Vinton, Ia. (51). **I K**
- *Ludlow, Jacob Lott, C. E., 434 Summit St., Winston, N. C. (50). **B D**
 Luebker, Otto, American Audit Co., Colorado Building, Washington, D. C. (50). **G**
- Lufkin, Albert, Newton, Iowa. (31). **D E**
 Lull, Richard S., Amherst, Mass. (43). **F H**
 Lund, James, 142 Hawthorne St., Malden, Mass. (45).
 Lundin, Carl A. R., care Messrs. Alvan Clark and Sons, Cambridgeport, Mass. (47). **A**
- *Luquer, Lea McIlvane, Columbia University, New York, N. Y. (49). 1902. **E**
 Lusk, Major James L., U. S. A., U. S. Engineer Office, Rock Island Ill. (52). **D**
- Luther, Miss Agnes Vinton, 917 Broad St., Newark, N. J. (47). **E**
- *Lyford, Edwin F., Springfield, Mass. (33). 1896. **B C H**
 Lyle, Benjamin F., M. D., 2302 W. Eighth St., Cincinnati, Ohio. (51). **K**
- *Lyle, David A., Major U. S. Army, Augusta Arsenal, Augusta, Ga. (28). 1880. **D**
- LYMAN, BENJ. SMITH, 708 Locust St., Philadelphia, Pa. (15). **E**
 Lyman, Chester W., Assistant to President of International Paper Co., 30 Broad St., New York, N. Y. (50). **I**
 Lyman, Henry H., F. R. G. S., F. E. S., 74 McTavish St., Montreal, Can. (29). **E F**
 Lyman, James, Assist. Engineer, Genl. Elec. Co., 1047 Monadnock Bldg., Chicago, Ill. (50). **D**

MEMBERS AND FELLOWS.

- Lynch, William H., Principal Mountain Grove School, Mountain Grove, Mo. (52). **I**
- Lyons, Albert Brown, M. D., Consulting Chemist, 72 Brainard St., Detroit, Mich. (50). **C K**
- Lyons, Robert E., Professor of Chemistry, University of Indiana, Bloomington, Ind. (51). **C**
- *Mabery, Prof. C. F., Case School of Applied Science, Cleveland, Ohio. (29). 1881. **C**
- McAdam, D. J., Teacher of Mathematics, Washington and Jefferson College, Washington, Pa. (51). **A**
- McAllister, Cloyd North, Ph. D., Instructor in Psychology, Yale University, New Haven, Conn. (52). **K**
- McAllister, Henry, Jr., Attorney at law, 512 Mining Exchange Building, Colorado Springs, Colo. (51).
- McAlpin, Charles Williston, 55 W. 33d St., New York, N. Y. (50).
- McAlvin, J. G., M. D., Grundy Center, Iowa. (52). **K**
- McArthur, Lewis L., M. D., 100 State St., Chicago, Ill. (51). **K**
- Macbeth, George A., Trustee Carnegie Institute, Pittsburg, Pa. (50). **D H**
- McBride, Hon. George Wickliffe, U. S. Comm'r La. Purchase Exposition, P. O. Box 173, Washington, D. C. (51). **I**
- McBride, Jas. H., M. D., Pasadena, Cal. (51). **K**
- *Macbride, Thomas H., Iowa City, Iowa. (38). 1890. **G**
- McCalley, Henry, Chief Assist. State Geologist, University, Ala. (50). **E**
- McCartney, Dr. James H., Room 501 Granite Building, Rochester, N. Y. (41). **A B**
- *McCauley, C. A. H., Colonel and Deputy Quartermaster-General, U. S. A., Manila, P. I. (29). 1881.
- McCaustland, Elmer James, Assistant Professor of Civil Engineering, Cornell University, Ithaca, N. Y. (52). **D**
- McClelland, James H., M. D., 5th and Wilkins Aves., Pittsburg, Pa. (50). **F K**
- *McClintock, Emory, Morristown, N. J. (43). 1895. **A**
- McClung, Clarence E., Ph. D., Professor of Zoology, University of Kansas, Lawrence, Kan. (52). **F**
- McCormick, Henry Dreer, M. D., Little Falls, N. J. (51). **K**
- McCoy, Lucinius S., Whitten, Hardin Co., Iowa. (50). **A**
- MacCracken, John Henry, Ph. D., President Westminster College, Fulton, Mo. (52). **I**
- *McCreath, Andrew S., 223 Market St., Harrisburg, Pa. (33). 1889. **C E**
- McCune, M. Virginia, M. D., 506 West John St., Martinsburg, W. Va. (51). **K**
- McCurdy, Arthur W., 143 Bloor St., West, Toronto, Ontario, Can. (52).

MEMBERS AND FELLOWS.

- *McCurdy, Charles W., Ph. D., 724 Real Estate Trust Bldg., Philadelphia, Pa. (35). 1895. **E F**
- *MacCurdy, George Grant, Ph. D., 237 Church St., New Haven, Conn. (48). 1900. **H**
- McCurdy, Hansford M., Manual Training High School, Kansas City, Mo. (51). **F G**
- McDermott, Rev. P. A., Roman Catholic Mission, old Calabon Vigeria, Western Africa. (51). **E H I**
- McFarland, Joseph, M. D., 442 West Stafford St., Philadelphia, Pa. (52). **K**
- Macdonald, Benjamin J., 296 Grand St., Newburgh, N. Y. (50). **I**
- McDonnell, Curtis C., Asst. Chemist Agric. Exper. Station, Clemson College, S. C. (51). **C**
- *McDonnell, Prof. Henry B., College Park, Md. (40). 1893. **C**
- *MacDougal, Daniel T., N. Y. Botanical Garden, Bronx Park, New York, N. Y. (44). 1897. **G**
- MacDougall, George R., 131 West 73d St., New York, N. Y. (49).
- *MacDougall, Robert, Ph. D., Sedgwick Park, University Heights, New York, N. Y. (49). 1901. **H K**
- McFadden, L. H., Westerville, Ohio. (32). **B C**
- McFadden, Thomas Gilbert, Lebanon Valley Coll., Annville, Pa. (48). **C**
- MacFarland, W. W., 22 William St., New York, N. Y. (49).
- *Macfarlane, A., Gowrie Grove, Chatham, Ontario, Can. (34). 1886. **A B**
- Macfarlane, James R., President Academy of Science and Art, Pittsburg, Pa. (50). **E**
- *Macfarlane, John M., Lansdowne, Pa. (41). 1899. **F G**
- McGahan, Chas. F., M. D., Aiken, S. C. (51). **K**
- *McGee, Dr. Anita Newcomb, 1901 Baltimore St., Washington, D. C. (37). 1892. **H**
- McGee, D. W., Farley, Iowa. (50). **E**
- McGee, Miss Emma R., Box 197, Farley, Iowa. (33). **H**
- McGee, John Bernard, M. D., 1405 Woodland Ave., Cleveland, Ohio. (51). **H K**
- *McGee, W J, Ph. D., Department of Anthropology, La. Purchase Exposition, St. Louis, Mo. (27). 1882. **E H**
- *McGill, John T., Ph. D., Vanderbilt University, Nashville, Tenn. (36). 1888. **C**
- McGregor, James Howard, Columbia University, New York, N. Y. (52). **F**
- *McGregory, Prof. J. F., Colgate University, Hamilton, N. Y. (35). 1892. **C**
- *McGuire, Joseph D., 1834 16th St., Washington, D. C. (51). 1902. **H**

MEMBERS AND FELLOWS.

- Machalske, Florentin J., Ph. D., Analytical and Consulting Chemist, P. O. Box 25, Station W, Brooklyn, N. Y. (52). **C**
- McHatton, Henry, M. D., Macon, Ga. (52). **K**
- MacIntyre, Miss Lucy, 303 West 74th St., New York, N. Y. (49).
- Mack, Jacob W., 92 Liberty St., New York, N. Y. (49).
- McKay, John S., Ph. D., Packer Collegiate Institute, Brooklyn, N. Y. (52).
- McKeag, Miss Anna J., 14 East 16th St., New York, N. Y. (51). **H**
- McKee, George C., care The Wm. Tod Co., Youngstown, Ohio. (48). **A B D**
- McKelvy, William H., M. D., President Board of Education, 420 6th Ave., Pittsburg, Pa. (50). **I**
- *McKenney, Randolph Evans Bender, Ph. D., Department of Agriculture, Washington, D. C. (51). 1903. **G**
- McKeown, W. W., Jr., Mining Engineer, Room 607, No. 160 Washington St., Chicago, Ill. (51). **D E**
- McKinney, Thomas Emery, Professor of Mathematics and Astronomy, Marietta College, Marietta, Ohio. (50). **A**
- McLain, Louis Randolph, Pres. of Florida Engineering Co., St. Augustine, Fla. (51). **D**
- Maclay, James, Ph. D., Adjunct Professor of Mathematics, Columbia University, New York, N. Y. (52). **A**
- McLanahan, George William, 1601 21st St. N.W., Washington, D. C. (50).
- MacLaren, Archibald, M. D., Lowny Bldg., 350 St. Peter St., St. Paul, Minn. (51). **K**
- McLaughlin, A. C., Houston Oil Co. of Texas, Houston, Texas, (52). **C D E**
- McLaughlin, George Eyerman, M. D., 41 Crescent Ave., Jersey City, N. J. (47). **F H**
- McLaughlin, Thomas N., 1226 N St., N. W., Washington, D. C (52).
- McLaury, Howard L., Prof. of Mathematics and Physics, So. Dakota School of Mines, Rapid City, So. Dak. (50). **A B**
- MacLean, George Edwin, President of the State University of Iowa, Iowa City, Iowa. (52). **I**
- *McLennan, John C., Professor of Physics, Toronto University, Toronto, Ontario, Can. (51). 1903. **B**
- McLimont, Andrew Wingate, Electrical Engineer, Linares, Nuevo Leon, Mexico. (51). **D**
- *Macloskie, Prof. George, Princeton Univ., Princeton, N. J. (25). 1882. **F G**
- McMahan, Charles Hays, E. M., Supt. Sombrerete Mining Co., Sombrerete, Zacatecas, Mexico. (50). **E**
- *McMahon, Prof. James, Cornell University, Ithaca, N. Y. (36). 1891. **A**

MEMBERS AND FELLOWS.

- McMILLAN, SMITH B., Signal, Ohio. (37).
- McMILLIN, EMERSON, 40 Wall St., New York, N. Y. (37).
- McMullen, Joseph Francis, 1908 Nora Ave., Spokane, Washington.
(52). **E G**
- *McMurtrie, William, 100 William St., New York, N. Y. (22). 1874.
C
- *McNair, Fred Walter, President Michigan College of Mines,
Houghton, Michigan. (51). 1902. **B D**
- McNeil, Hiram Colver, Teacher of Chemistry and Physics,
Shurtleff College, Upper Alton, Ill. (51). **B C**
- *McNeill, Malcolm, Professor Mathematics and Astronomy, Lake
Forest University, Lake Forest, Ill. (32). 1885. **A**
- McNulty, Geo. Washington, Civil Engineer, 258 Broadway, New
York, N. Y. (51). **D**
- McNulty, John J., Ph. D., College of City of New York, New
York, N. Y. (50).
- *MacNutt, Barry, Lehigh University, So. Bethlehem, Pa. (47).
1900. **B**
- *McPherson, Prof. Wm., Ohio State Univ., Columbus, Ohio. (45).
1898. **C**
- McPherson, William D., 58 Hartford St., So. Framingham, Mass.
(47).
- McQueeney, Francis J., M. D., 46 Dartmouth St., Boston, Mass.
(51). **K**
- *McRae, Austin Lee, Professor of Physics, School of Mines and
Metallurgy, University of Missouri, Rolla, Mo. (39). 1891. **B**
- MacVannel, John Angus, Instructor in Philosophy and Education,
Columbia University, New York, N. Y. (52). **I**
- Macy, V. Everit, 68 Broad St., New York, N. Y. (49).
- Magee, Louis J., Electrical Engineer, 25 Broad St., New York,
N. Y. (50). **B D**
- *Magie, Prof. Wm. Francis, Princeton University, Princeton, N. J.
(35). 1887.
- Magill, Arthur Edward, Hotel Stratford, Washington, D. C. (52).
C
- Magill, Dr. Wm. Seagrove, Dry Milk Co., 11 Broadway, New
York, N. Y. (52). **K**
- Magnusson, Carl Edward, Ph. D., Prof. of Physics, University of
New Mexico, Albuquerque, N. M. (51). **D**
- Magruder, Egbert W., Chemist, Department of Agriculture,
Richmond, Va. (51). **C**
- *Magruder, Wm. T., Ohio State Univ., Columbus, Ohio. (37).
1899.
- Mahin, John William, Teacher in Manual Training High School,
Denver, Colo. (50). **B C E**

MEMBERS AND FELLOWS.

- Mahoney, Stephen A., M. D., 206 Maple St., Holyoke, Mass. (51). **K**
- Major, David R., Ph. D., Prof. of Education, Ohio State University, Columbus, Ohio. (51). **H I**
- Makuen, G. Hudson, M. D., 1419 Walnut St., Philadelphia, Pa. (51). **K**
- Mallet, J. W., University of Virginia, Charlottesville, Va. (52).
- Mallinckrodt, Edw., P. O. Sub-Station A, St. Louis, Mo. (29). **C**
- Mally, Charles William, Dept. Agric., Cape Town, So. Africa. (46).
- Mally, Fred'k William, Garrison, Tex. (50). **F G**
- Malm, John Lawrence, Marysville, Mont. (50). **C E**
- *Maltby, Margaret E., Ph. D., Barnard College, New York, N. Y. (46). 1898.
- Mangan, Daniel C., M. D., 95 Park Ave., Brooklyn, N. Y. (50). **F K**
- Mann, Albert, Ph. D., 18 Summit St., East Orange, N. J. (43). **G**
- *MANN, B. PICKMAN, 1918 Sunderland Place, Washington, D. C. (22). 1874. **F I**
- Mann, Paul Blakeslee, 45 East Avenue, Ithaca, N. Y. (52). **F**
- Manning, Charles H., U. S. N., Manchester, N. H. (35). **D**
- Manning, Miss Eva, 1330 Columbia Road, Washington, D. C. (52). **E H**
- Manning, J. Woodward, 1150 Tremont Building, Boston, Mass. (47). **G**
- Manning, Warren H., Brookline, Mass. (31). **E F H**
- Mansfield, Albert K., 125 Lincoln Ave., Salem, Ohio. (51). **D**
- Manson, Marsden, Comm'r of Public Works, 2010 Gough St., San Francisco, Cal. (51). **D**
- Mapes, Charles Victor, 60 W. 40th St., New York, N. Y. (37). **C**
- Marble, J. Russel, Worcester, Mass. (31). **C E**
- MARBLE, MANTON, Bedford, N. Y. (36).
- Marble, Milton M., Instructor in Physics, Hillhouse High School, New Haven, Conn. (50). **B**
- Marble, Miss Sarah, Woonsocket, R. I. (29). **C**
- *Marindin, Henry Louis, U. S. C. and G. Survey, Washington, D. C. (40). 1898. **E**
- *Mark, Prof. E. H., Superintendent of Public Schools, Center and Walnut Sts., Louisville, Ky. (39). 1893. **B**
- *Mark, Edward Laurens, Director Zoological Laboratory, Harvard University, Cambridge, Mass. (50). 1901. **F**
- Markham, George Dickson, 4961 Berlin Ave., St. Louis, Mo. (50).
- Marks, Louis B., 687 Broadway, New York, N. Y. (50).
- Marks, William Dennis, C. E., The Art Club, Philadelphia, Pa. (50). **I**
- Marlatt, Miss Abby L., Manual Training High School, Providence, R. I. (48).
- *Marlatt, Charles L., U. S. Department Agriculture, Washington, D. C. (40). 1895. **F**

MEMBERS AND FELLOWS.

- Marlow, Frank William, M. D., 200 Highland St., Syracuse, N. Y. (50). **F H I K**
- Marmoi, Rev. J. D., 1812 McCulloh St., Baltimore, Md. (52). **E H K**
- Marple, Charles A., 743 Third Ave., Louisville, Ky. (39). **B**
- Marsden, Samuel, 1015 N. Leffengwell Ave., St. Louis, Mo. (27). **A D**
- *Marsh, C. Dwight, Ripon College, Ripon, Wis. (34). 1893. **E F**
- Marsh, James P., M. D., 1828 5th Ave., Troy, N. Y. (51). **K**
- Marshall, Horace Miller, U. S. Engineer Office, Vicksburg, Miss. (51). **D**
- Marsters, Vernon, Indiana University, Bloomington, Ind. (49).
- Marston, Edwin S., 291 Clinton Ave., Brooklyn, N. Y. (50).
- *Martin, Artemas, Ph. D., LL.D., U. S. Coast and Geodetic Survey, Washington, D. C. (38). 1890. **A**
- *Martin, Daniel S., 126 Macon St., Brooklyn, N. Y. (23). 1879. **E F**
- Martin, F. W., Ph. D., Dir. Chem. Lab., Randolph-Macon Women's College, College Park, Va. (49). **C**
- *Martin, George C., Assistant Geologist, Maryland Geological Survey, Johns Hopkins University, Baltimore, Md. (51). 1903. **E**
- Martin, Geo. W., Professor of Biology, Vanderbilt University, Nashville, Tenn. (52). **F**
- Martin, Louis Adolphe, Jr., Instructor in Mathematics and Mechanics, Stevens' Institute, Hoboken, N. J. (53). **A**
- Martin, William Lyon, Augusta, Ga. (50). **H**
- *Marvin, C. F., U. S. Weather Bureau, Washington, D. C. (39). 1892. **B**
- *Marvin, Frank O., Dean School of Engineering, University of Kansas, Lawrence, Kan. (35). 1894. **D**
- Marvin, Harry Norton, 11 E. 14th St., New York, N. Y. (50). **D**
- Marvin, Joseph B., M. D., LL.D., President Kentucky University, Louisville, Ky. (51). **I**
- Marvin, Walter T., 36 Knox St., Cleveland, Ohio. (50). **H I**
- Mason, Amos Lawrence, M. D., Physician to Boston City Hospital, 265 Clarendon St., Boston, Mass. (50). **K**
- Mason, Lewis D., M. D., 171 Joralemon St., Brooklyn, N. Y. (51). **K**
- Mason, Miss Nellie M., Teacher of Science, Abbot Academy, Andover, Mass. (50). **B C**
- *Mason, Otis T., U. S. National Museum, Washington, D. C. (25). 1877. **H**
- *Mason, Dr. William P., Rensselaer Polytechnic Inst., Troy, N. Y. (31). 1886. **C**
- Massey, Wilbur Fisk, Botanist and Horticulturist, Agricultural Exper. Station, Raleigh, N. C. (51). **G**

MEMBERS AND FELLOWS.

- Mast, Samuel Ottnear, Holland, Mich. (52).
- Matas, Rudolph, M. D., Professor of Surgery, Tulane University, New Orleans, La. (50). **H K**
- Mateer, Horace N., M. D., Wooster, Ohio. (36). **E F**
- *Mathews, John A., Ph. D., Crucible Steel Co, of America, Experimental Dept., Syracuse, N. Y. (50). 1902. **C E**
- Mathews, Miss Mary Elizabeth, Painesville, Ohio. (41). **F**
- Matlack, Charles, "Hidden Hearth," Matunuck, R. I. (27). **I**
- Matlack, Ellwood V., Sec'y and Mgr. Laclede Power Co., St. Louis, Mo. (50). **D**
- Matthes, Francois E., U. S. Geological Survey, Washington, D. C. (52). **E**
- Matthews, Albert, 145 Beacon St., Boston, Mass. (51). **H**
- *Matthews, Dr. Washington, 1262 N. H. Ave., Washington, D. C. (37). 1888. **H**
- Mattison, Fitch C. E., M. D., Stowell Building, Pasadena, Cal. (51). **K**
- Mattoon, A. M., Scott Observatory of Park College, Parkville, Mo. (47). **A**
- Maxon, William R., U. S. National Museum, Washington, D. C. (49).
- Maxwell, Fred. Baldwin, Ph. D., 308 Franklin Ave., River Forest, Oak Park P. O., Ill. (51). **F**
- Maxwell, George H., Chairman Executive Committee, National Irrigation Association, 1827 Phelps Place, Washington, D. C. (50). **E**
- Maxwell, Hu., Treasurer Transallegheeny Historical Society, Morgantown, W. Va. (50). **E**
- *Mayer, Alfred Goldsborough, S. D., M. E., Museum Brooklyn Institute, Eastern Parkway, Brooklyn, N. Y. (47). 1900. **F**
- Maynard, George C., 1407 15th St., Washington, D. C. (35). **B D**
- Maynard, Washburn, Captain U. S. N., Light House Board, Treasury Department, Washington, D. C. (33). **B**
- Mayo, Caswell A., 1536 Fiftieth St., Brooklyn, N. Y. (52).
- Mead, A. D., Brown University, Providence, R. I. (52). **F**
- Mead, Chas. S., 217 King Ave., Columbus, Ohio. (52). **F**
- *Mead, Elwood, Chief Irrigation Investigations, U. S. Department Agriculture, Washington, D. C. (51). 1902. **D**
- Means, James, 196 Beacon St., Boston, Mass. (47).
- *Mearns, Maj. Edgar A., M. D., U. S. A., Manila, P. I. (49). 1901. **K**
- Medsger, Oliver P., Jacob's Creek, Pa. (50). **G**
- Meehan, S. Mendelson, Germantown, Philadelphia, Pa. (51). **G**
- *Mees, Prof. Carl Leo, Rose Polytechnic Institute, Terre Haute, Ind. (24). 1876. **B C**
- Meigs, Miss Emily, Lafayette, Ind. (52). **H**

MEMBERS AND FELLOWS.

- Meigs, Montgomery, U. S. A., U. S. Civil Engineer, Office of D. M. R. Canal, Keokuk, Iowa. (51). **D**
- *Mell, P. H., Ph. D., President of Clemson Agricultural College, Clemson College, S. C. (39). 1895. **E G**
- Mellen, Edwin D., Manufacturer, 1590 Massachusetts Ave., Cambridge, Mass. (51). **D**
- Mellish, Ernest Johnson, M. D., El Paso, Texas. (52). **K**
- Mellor, Alfred, President of the Mellor and Rittenhouse Co., 2130 Mt. Vernon St., Philadelphia, Pa. (51).
- Mellor, Charles C., 319 Fifth Ave., Pittsburg, Pa. (38).
- *Meltzer, S. J., M. D., 166 West 126th St., New York, N. Y. (49). 1901. **K**
- *Mendenhall, Charles E., Ph. D., University of Wisconsin, Madison, Wis. (48). 1900. **B**
- *Mendenhall, T. C., Worcester, Mass. (20). 1874. **B**
- *Mendenhall, Walter Curran, U. S. Geological Survey, Washington, D. C. (52). 1903. **E**
- Mengel, Prof. Levi W., Boys High School, Reading, Pa. (52).
- Menninger, Charles Frederic, M. D., 1251 Topeka Ave., Topeka, Kan. (50). **F G K**
- *Mercer, H. C., Doylestown, Pa. (41). 1893. **H**
- Mercer, William Fairfield, Ph. D., Professor of Biology, Ohio University, Athens, Ohio. (50). **F**
- *Merriam, Dr. C. Hart, U. S. Department Agriculture, Washington, D. C. (49). 1900. **F**
- Merriam, John C., Ph. D., Assistant Professor of Paleontology and Historical Geology, Univ. of California, Berkeley, Cal. (52). **E**
- Merrill, Earle Abbott, 26 Cortlandt St., New York, N. Y. (50). **D**
- Merrill, Elmer Drew, Insular Bureau of Agriculture, Manila, P. I. (50). **G**
- *MERRILL, FREDERICK J. H., Ph. D., New York State Museum, Albany, N. Y. (35). 1887. **E**
- Merrill, Joseph Francis, Ph. D., Professor of Physics and Electrical Engineering, University of Utah, Salt Lake City, Utah. (50). **B D**
- Merrill, Lucius Herbert, Professor of Biological Chemistry, University of Maine, Orono, Maine. (50). **C**
- Merrill, Payson, 111 Broadway, New York, N. Y. (50).
- MERRILL, MRS. WINIFRED EDGERTON, Ph. D., 268 State St., Albany, N. Y. (35). **A**
- *Merriman, C. C., 1910 Surf St., Lake View, Chicago, Ill. (29). 1880. **F**
- *Merriman, Mansfield, Lehigh University, So. Bethlehem, Pa. (32). 1885. **A D I**
- *Merritt, Ernest, Cornell University, Ithaca, N. Y. (33). 1890. **B**

MEMBERS AND FELLOWS.

- Merrow, Miss Harriet L., Rhode Island College of Agriculture and Mechanic Arts, Kingston, R. I. (44).
- Merryweather, George N., 639 Forest Ave., Avondale, Cincinnati, Ohio. (30). **F H**
- Mershon, Ralph D., Consulting Engineer, 621 Broadway, New York, N. Y. (50). **D**
- Messenger, James Franklin, Ph. D., Professor of Psychology, State Normal School, Winona, Minn. (52). **H K**
- Metcalf, Haven, Prof. of Botany, Clemson College, S. C. (52). **G**
- *Metcalf, Maynard M., Ph. D., Professor of Biology, The Woman's College, Baltimore, Md. (50). 1901. **F**
- METCALF, ORLANDO, 424 Telephone Building, Pittsburg, Pa. (35). **D**
- *Metcalf, William, 1 Fulton St., Pittsburg, Pa. (33). 1894. **D**
- Metcalf, Wilmot V., Professor of Chemistry and Physics, Carleton College, Northfield, Minn. (50). **B C**
- Metcalf, Captain Henry, 143 Liberty St., New York, N. Y. (50).
- *Metzler, William H., Ph. D., Syracuse University, Syracuse, N. Y. (45). 1899. **A**
- Meyer, Adolf, M. D., Director of Pathological Institute of N. Y. State Hospital, Ward's Island, New York, N. Y. (52). **K**
- Meyer, John Franklin, Morgan Lab. of Physics, Univ. of Penna., Philadelphia, Pa. (51). **B**
- *Meyer, Max, Ph. D., Professor of Psychology, University of Missouri, Columbia, Mo. (49). 1901. **H I**
- *Mezes, Sidney Edward, Professor of Philosophy, University of Texas, Austin, Texas. (50). 1901. **I**
- *Michael, Mrs. Helen Abbott, 35 West Cedar St., Boston, Mass. (33). 1885. **C F**
- *Michelson, Prof. A. A., Chicago University, Chicago, Ill. (26). 1879. **B**
- Miggett, W. L., Supt. of Shops, Univ. of Michigan, Ann Arbor, Mich. (51). **D**
- Miles, Mrs. Cornelia, Principal of Broadway School, 1544 Franklin St., Denver, Colo. (50). **G**
- Miles, Francis T., M. D., 514 Cathedral St., Baltimore, Md. (50). **F K**
- Milham, Willis I., Williams College, Williamstown, Mass. (47). **A B**
- Millar, John M., Escanaba, Mich. (50).
- Millard, Charles Sterling, Hammond, La. (51). **D**
- Miller, Armand R., Professor of Chemistry, Manual Training High School, Kansas City, Mo. (50). **C**
- *Miller, Arthur M., Professor of Geology and Zoology, State College, Lexington, Ky. (45). 1898. **E**
- Miller, Benjamin LeRoy, Johns Hopkins Univ., Baltimore, Md. (50). **E**

MEMBERS AND FELLOWS.

- *Miller, Prof. Dayton C., Case School of Applied Science, Cleveland, Ohio. (44). 1898. **B**
 MILLER, EDGAR G., 213 E. German St., Baltimore, Md. (29).
A E F
- *Miller, Edmund H., Ph. D., Columbia University, New York, N. Y. (50). 1901. **C**
 Miller, Emerson R., Professor of Pharmacy, Alabama Polytechnic Institute, Auburn, Alabama. (52). **C**
- *Miller, Ephraim, Professor of Mathematics and Astronomy, State University, Lawrence, Kan. (50). 1901. **A**
 Miller, Frank E., Professor of Mathematics, Otterbein University, Westerville, Ohio. (44). **A**
 Miller, Capt. Frederick Augustus, U. S. N., 2201 Massachusetts Ave., Washington, D. C. (52).
 Miller, Fred. J., Editor of "American Machinist," 34 Beech St., E. Orange, N. J. (51). **D**
- *Miller, George A., Ph. D., Stanford University, Cal. (46). 1898. **A**
 Miller, George N., M. D., 811 Madison Ave., New York, N. Y. (50).
K
- Miller, Gerrit S., U. S. National Museum, Washington, D. C. (51). **F**
 Miller, Henry Huntington, Mining and Metallurgical Engineer and Chemist, San Nicholas del Oro, Estado de Guerrero, Mex. (50). **C D E**
- Miller, Herbert Stanley, Electrical Engineer, 1025 East Jersey St., Elizabeth, N. J. (50). **D**
 Miller, Horace George, M. D., 189 Bowen St., Providence, R. I. (51). **K**
 Miller, James Shannon, Professor of Mathematics, Emory and Henry College, Emory, Va. (51). **A B**
 Miller, John A., 2500 Park Ave., Cairo, Ill. (22). **D**
 Miller, John A., Professor of Mechanics and Astronomy, Indiana University, Bloomington, Ind. (51). **A**
 Miller, John Craig, M. D., Professor of Natural Science, Lincoln University, Pa. (50). **B C F K**
- Miller, Miss Louise Klein, Dir. Lowthorpe School of Horticulture and Landscape Gardening for Women, Groton, Mass. (50). **I**
 Miller, P. Schuyler, Mt. Prospect Laboratory, Flatbush Ave., Brooklyn, N. Y. (46). **C**
 Miller, Pleasant T., 816 No. 9th St., Temple, Texas. (50).
- *Miller, Prof. William S., University of Wisconsin, Madison, Wis. (42). 1894. **F**
 Millis, John, Major of Engineers, U. S. A., U. S. Engineer's Office, Seattle, Wash. (48). **A B D E**
 Mills, Frank Smith, 68 Central St., Andover, Mass. (52). **E**

MEMBERS AND FELLOWS.

- Mills, James Edward, Instructor in Physical Chemistry, University of North Carolina, Chapel Hill, N. C. (52).
- *Mills, Prof. James, Ontario Agricultural College, Guelph, Ontario, Can. (31). 1895. **C I**
- *Mills, Prof. Wesley, McGill University, Montreal, Can. (31). 1886. **F H**
- *Mills, William C., Orton Hall, Ohio State University, Columbus, Ohio. (48). 1902. **H**
- Mills, Wm. Park, M. D., Missoula, Mont. (52).
- Milne, David, 2030 Walnut St., Philadelphia, Pa. (51).
- Miner, James Burt, Ph. D., Instructor in Psychology, University of Illinois, Urbana, Ill. (52). **H K**
- Minns, Miss S., 14 Louisburg Square, Boston, Mass. (32).
- *MINOT, CHARLES SEDGWICK, M. D., Harvard Medical School, Boston, Mass. (28). 1880. **F**
- Mitchell, Andrew S., Analytical and Consulting Chemist, State Analyst, 220 Greenbush St., Milwaukee Wis. (51). **C**
- Mitchell, Edward, 44 Wall St., New York, N. Y. (50).
- Mitchell, Guy E., Sec'y National Irrigation Association, 1419 F St., N.W., Washington, D. C. (53). **I**
- Mitchell, Henry Bedinger, Tutor in Mathematics, Columbia University, New York, N. Y. (50). **A**
- Mitchell, James, Newburgh, N. Y. (50). **A**
- Mitchell, John Pearce, Assistant in Chemistry, Stanford University, Cal. (51). **C**
- Mitchell, Roland G., 141 Water St., New York, N. Y. (50).
- Mitchell, Samuel Alfred, Ph. D., Columbia University, New York, N. Y. (52). **A B**
- Mitchell, William Francis, M. D., Lancaster, Mo. (51). **K**
- Mixer, Chas. Adam, Civil Engineer, Resident Engineer, Rumford Falls Power Co., Rumford Falls, Maine. (51). **D**
- Mixer, Fred. K., 546 Delaware Ave., Buffalo, N. Y. (35). **E**
- *Miyake, Kiichi, Ph. D., Botanisches Institut, Universitat zu Bonn, Bonn, Germany. (51). 1903. **G**
- Moenkhaus, Wm. J., Bloomington, Ind. (51).
- Mohler, John F., Professor of Physics, Dickinson College, Carlisle, Pa. (44). **B**
- Mohr, Charles, M. D., Professor of Materia Medica and Therapeutics, Hahnemann Medical College and Hospital, Philadelphia, Pa. (51). **K**
- Mohr, Louis, M. E., 32 Illinois St., Chicago, Ill. (50). **A D**
- Mojonnier, Timothy, care of Helvetia Milk Condensing Co., Greenville, Ill. (52). **C**
- *Moler, Geo. S., 106 University Ave., Ithaca, N. Y. (38). 1892.
- MOLERA, E. J., Civil Engineer, 606 Clay St., San Francisco, Cal. (50) **D**

MEMBERS AND FELLOWS.

- Molitor, David, Civil and Consulting Engineer, 125 Park Ave.,
Fond du Lac, Wis. (51). **C D**
- Molitor, Frederic Albert, Fort Smith, Ark. (51). **D**
- Momsen, Hart, Chief Clerk, Div. of Agric. Census Office, Washing-
ton, D. C. (50). **I**
- Monfort, Wilson F., Marietta College, Marietta, Ohio. (48). **C**
- Monroe, Joseph E., Professor of Physics and Chemistry, Montana
State Normal School, Dillon, Mont. (50). **B C**
- *Monroe, Will S., State Normal School, Westfield, Mass. (49).
1901. **H**
- Montgomery, Edmund, M. D., Hemstead, Texas. (50). **F K**
- Montgomery, Edmund B., M. D., 134 North 8th St., Quincy, Ill.
(51). **K**
- Montgomery, James H., Meadville, Pa. (50).
- Moody, Mrs. Mary B., M. D., Fair Haven Heights, New Haven,
Conn. (25). **E F**
- *Moody, Robert O., M. D., Hearst Anatomical Laboratory, San
Francisco, Cal. (35). 1892. **F**
- Moody, William Albion, Professor of Mathematics, Bowdoin
College, Brunswick, Maine. (50). **A**
- Moore, Mrs. A. H., Stanstead, P. Q., Canada. (32). **H**
- *Moore, Burton E., University of Nebraska, Lincoln, Neb. (41).
1899. **B**
- Moore, Charles James, E. M., P. O. Box 548, Cripple Creek,
Colo. (50). **D E**
- *Moore, Clarence B., 1321 Locust St., Philadelphia, Pa. (44). 1897.
H
- *Moore, Eliakim Hastings, Professor of Mathematics, University
of Chicago, Chicago, Ill. (52). 1902. **A**
- Moore, Ernest Carroll, Ph. D., Instructor in Philosophy, Uni-
versity of California, Berkeley, Cal. (50). **I**
- *Moore, George Thomas, U. S. Dept. Agriculture, Washington,
D. C. (49). 1901. **G**
- *Moore, J. W., M. D., Lafayette College, Easton, Pa. (22). 1874.
A B D
- *Moore, Philip North, Geologist and Mining Engineer, 121 Laclede
Bldg., St. Louis, Mo. (50). 1903. **E**
- Moore, Robert, Civil Engineer, 61 Vandeventer Place, St. Louis,
Mo. (51). **D**
- Moore, Stanley H., Manual Training High School, Kansas City,
Mo. (50). **A D**
- *Moore, Willis L., Chief of the Weather Bureau, U. S. Dept. Agri-
culture, Washington, D. C. (44). 1897. **B**
- *Moorehead, Warren K., Curator of Museum, Phillips Academy,
Andover, Mass. (38). 1890. **H**

MEMBERS AND FELLOWS.

- Morgan, H. A., Professor of Zoology and Entomology, State University, Baton Rouge, La. (50). **F**
- Morgan, Wm. Conger, Ph. D., Instructor in Chemistry, University of California, Berkeley, Cal. (52). **C**
- Morgan, Wm. F., Short Hills, N. J. (27).
- *Morley, Prof. Edward W., Adelbert College, Cleveland, Ohio. (18). 1876. **B C E**
- Morrey, Charles B., Ohio State University, Columbus, Ohio. (48). **F**
- Morris, Edward Lyman, Washington High School, Washington, D. C. (52). **G**
- Morris, F. W., Villa Nova, Pa. (51).
- Morris, Henry L., 16 Exchange Place, New York, N. Y. (49).
- Morris, Newbold, 52 E. 72d St., New York, N. Y. (49).
- Morris, Robert C., Clerk of Wyoming Supreme Court, Cheyenne, Wyoming. (51). **I**
- Morris, Robert Tuttle, Professor of Surgery, N. Y. Post Graduate Medical School, 58 W. 56th St., New York, N. Y. (51). **K**
- Morris, Russell Love, Professor of Civil and Mining Engineering, West Virginia State University, Morgantown, W. Va. (50). **D**
- Morrison, Charles Edward, C. E., 131 Hamilton Place, New York City. (51). **D**
- Morrison, Gilbert B., 2510 Perry Ave., Kansas City, Mo. (48). **B C I**
- Morrison, Thomas, Manager, Edgar Thomson Steel Works, Braddock, Pa. (51). **D**
- Morse, Albert P., Wellesley, Mass. (50). **F**
- *Morse, E. S., Salem, Mass. (18). 1874. **F H**
- Morse, Fred. W., Prof. of Organic Chemistry, New Hampshire College, Durham, N. H. (51). **C**
- Morse, John Torrey, Jr., 16 Fairfield Street, Back Bay, Boston, Mass. (52).
- Morse, Max W., Biological Hall, Ohio State University, Columbus, Ohio. (51). **F**
- Morse, Warner Jackson, Instructor in Botany, University of Vermont, Burlington, Vt. (52). **G**
- Morse, Willard S., Apartado "A," Aguascalientes, Mexico. (50). **C D E**
- Mortensen, Casper, 13 Cedar St., Schenectady, N. Y. (51).
- Morton, George L., Room 256, Patent Office, Washington, D. C. (52). **B D**
- *Moseley, Edwin L., High School, Sandusky, Ohio. (34). 1902. **G**
- *Moser, Jefferson F., Commander U. S. N., Commanding U. S. S. "Pensacola," Station D, San Francisco, Cal. (28). 1889. **E**
- *Moses, Prof. Alfred J., Columbia University, New York, N. Y. (49). 1902. **E**
- *Moses, Dr. Thomas F., Worcester Lane, Waltham, Mass. (25). 1883. **F H**

MEMBERS AND FELLOWS.

- Mosman, Alonzo T., U. S. Coast and Geodetic Survey, Washington, D. C. (51). **D**
- Motter, Murray Galt, M. D., 1815 Belmont Ave., Washington, D. C. (51). **K**
- *Mottier, David M., Ph. D., Professor of Botany, University of Indiana, Bloomington, Ind. (50). 1901. **F G K**
- *Moulton, Forest Ray, Ph. D., Instructor in Celestial Mechanics, University of Chicago, Chicago, Ill. (50). 1901. **A**
- Moulton, W. H., Asst. Manager, Osborn Mfg. Co., Mayfield Heights, Cleveland, Ohio. (53). **D**
- Mount, William D., M. E., General Superintendent, Mathieson Alkali Works, Saltville, Va. (51). **D**
- Moyer, Harold N., M. D., 103 State St., Chicago, Ill. (51). **K**
- Moyer, Lycurgus R., C. E., Montevideo, Minn. (50). **D G**
- Muckenfuss, A. M., Professor of Chemistry and Physics, University of Arkansas, Fayetteville, Ark. (52). **B C**
- Mueller, Edward, Assistant Chemist, N. & W. R.R., Roanoke, Va. (52). **C**
- *Muir, John, Martinez, Cal. (22). 1900. **G**
- Mulford, Miss A. Isabel, Central High School, St. Louis, Mo. (45). **G**
- Mullan, W. G. R., President Boston College, Boston, Mass. (52).
- *Mulliken, Samuel P., Mass. Inst. Technology, Boston, Mass. (43). 1899.
- Mullin, Edward Hemphill, 44 Broad St., New York, N. Y. (52).
- Muncaster, Stewart Brown, M. D., 907 Sixteenth St. N.W., Washington, D. C. (51). **K**
- Munro, John Cummings, M. D., Instructor in Surgery, Harvard Medical School, Boston, Mass. (50). **F K**
- *MUNROE, PROF. C. E., Columbian University, Washington, D. C. (22). 1874. **C**
- Munson, T. V., Nurseryman, Denison, Texas. (51). **G**
- *Munson, Welton M., Prof. of Horticulture, The University of Maine, Orono, Me. (41). 1899. **F G**
- *Munsterberg, Hugo, Harvard University, Cambridge, Mass. (47). 1898.
- *Murdoch, John, Public Library, Boston, Mass. (29). 1886. **F H**
- Murdock, George J., Mechanician and Inventor, 248 Sixth Ave., Newark, N. J. (50). **A D**
- Murray, Charles R., 1207 Maple Ave., Evanston, Ill. (47). **D**
- *Murray, Daniel A., Ph. D., Dalhousie College, Halifax, N. S. (47). 1899. **A**
- Murray-Aaron, Dr. Eugene, Lanier Heights, Washington, D. C. (52). **F**
- Murray, Robert Drake, M. D., Surgeon Marine Hospital Service, Key West, Fla. (50). **K**

MEMBERS AND FELLOWS.

- Myer, Mrs. Mary H., 44 Mt. Vernon St., Boston, Mass. (44).
 Myers, Edward W., North Carolina Geological Survey, Chapel Hill, N. C. (49).
 *Myers, Prof. Geo. W., 6026 Monroe Ave., Chicago, Ill. (46). 1899.
A
 *Myers, William S., M. Sc., F. C. S., Director Chilean Nitrate Works, 12 John St., New York, N. Y. (43). 1898. **C**
 Myres, John L., M. A., F. S. A., Christ Church, Oxford, England. (46). **H**
 *Nagle, Prof. James C., A. and M. College, College Station, Texas, (40). 1893. **B D**
 Naphen, Hon. Henry F., Member of Congress, 311 Pemberton Building, Boston, Mass. (51). **I**
 Nash, Geo. V., Norwood Heights, Williamsbridge, New York, N. Y. (47).
 *Nason, Frank L., West Haven, Conn. (36). 1888. **E**
 *Needham, James G., Lake Forest College, Lake Forest, Ill. (45). 1898. **F**
 *Nef, J. U., University of Chicago, Chicago, Ill. (39). 1891. **C**
 Neff, Isaac E., Principal of High School, Kankakee, Ill. (51).
 Negley, Henry Hillis, 600 N. Negley Ave., Pittsburg, Pa. (50). **G**
 Neiler, Samuel Graham, Consulting and Designing Engineer, 1409 Manhattan Bldg., Chicago, Ill. (50). **D**
 Neilson, John, Larchmont N. Y. (50).
 Neilson, Walter Hopper, M. D., Ed. "Milwaukee Medical Journal," 114 Garfield Ave., Milwaukee, Wis. (51). **K**
 *Nelson, Aven, Professor of Biology, University of Wyoming, Laramie, Wyoming. (50). 1903. **G**
 *Nelson, Prof. A. B., Centre College, Danville, Ky. (30). 1882,
A B D
 Nelson, Wm., Rooms 7 and 8, Paterson Natl. Bank, Paterson, N. J. (42).
 Nesmith, Henry E., Jr., 28 South St., New York, N. Y. (30). **B C F**
 Ness, Helge, Professor of Botany, Agric. & Mech. College, College Station, Texas. (50). **G**
 *Newcomb, H. T., Kensington, Md. (47). 1898. **I**
 *Newcomb, Prof. S., 1620 P St. N.W., Washington, D. C. (13). 1874. **A B**
 *Newcombe, Frederick Charles, 1021 E. University Ave., Ann Arbor, Mich. (43). 1896. **G**
 Newell, Frank Clarence, 434 Rebecca Ave., Wilkensburg, Pa. (51). **D**
 *Newell, F. H., U. S. Geol. Survey, Washington, D. C. (40). 1893. **E**
 *Newell, William Wells, Editor "Journal American Folk Lore," Cambridge, Mass. (41). 1893. **H**

MEMBERS AND FELLOWS.

- *Newsom, John F., Stanford University, Cal. (44). 1903. **E**
- *Newson, Henry Byron, Assistant Professor of Mathematics, University of Kansas, Lawrence, Kansas. (50). 1901. **A**
- Nichols, Austin P., 4 Highland Ave., Haverhill, Mass. (37).
- *Nichols, Ernest Fox, Columbia University, New York, N. Y. (41). 1893. **B**
- *Nichols, E. L., Ph. D., Cornell University, Ithaca, N. Y. (28). 1881. **B C**
- Nichols, Othniel Foster, C. E., Principal Assistant Engineer, New East River Bridge, 42 Gates Ave., Brooklyn, N. Y. (51). **D**
- Nicola, Frank F., Cor. Wood and Sixth Aves., Pittsburg, Pa. (50). **D**
- Niles, Robert Lossing, 66 Broadway, New York, N. Y. (47). **B C D**
- *Niles, Wm. H., Mass. Inst. Tech., Boston, Mass. (16). 1874. **E**
- *Nipher, Prof. Francis E., Washington University, St. Louis, Mo. (24). 1876. **B**
- *Nolan, Edw. J., M. D., Acad. Nat. Sciences, Philadelphia, Pa. (29). 1890. **F**
- Nolte, Lewis G., M. D., Senn's Block, Milwaukee, Wis. (51). **K**
- Norton, A. Wellington, Madison, S. Dak. (52). **I**
- Norton, J. B., Dept. of Agriculture, Washington, D. C. (52). **G**
- *Norton, J. B. S., College Park, Md. (47). 1899. **G**
- *NORTON, THOMAS H., U. S. Consul, Harput, Turkey in Asia. (35). 1887. **C**
- Notestein, F. N., Professor of Mathematics and Physics, Alma College, Alma, Mich. (50). **A B**
- Nott, Charles Palmer, P. O. Box 281, Palo Alto, Cal. (50).
- *Novy, Dr. Frederick G., Univ. of Michigan, Ann Arbor, Mich. (36). 1889. **C**
- *Noyes, Prof. Arthur A., Mass. Inst. Technology, Boston, Mass. (45). 1897. **C**
- Noyes, Isaac Pitman, 409 4th St., S.E., Washington, D. C. (49).
- Noyes, Theodore Richards, M. D., Kenwood, N. Y. (51).
- *Noyes, Prof. Wm. A., Johns Hopkins University, Baltimore, Md. (23). 1885. **C**
- Nunn, R. J., M. D., 5 York St., East Savannah, Ga. (33). **B H**
- *Nuttall, Mrs. Zelia, Casa Alvarado, Coyoacan, D. F., Mexico. (35). 1887. **H**
- *Nutting, Prof. Charles C., State University of Iowa, Iowa City, Iowa. (40). 1892. **F**
- Nutting, Perley Gilman, National Bureau of Standards, Washington, D. C. (53). **A**
- Nylander, Olof O., Box 165, Caribou, Maine. (50). **F**
- Oakes, F. James, 58 Stone St., New York, N. Y. (49).

MEMBERS AND FELLOWS.

- *Oberholser, Harry Church, Biological Survey, U. S. Dept. Agriculture, Washington, D. C. (46). 1898. **E F H**
- O'Brien, Matthew Watson, M. D., 908 Cameron St., Alexandria, Va. (51). **K**
- Obrig, Adolph, "The Dakota," 1 W. 72d St., New York, N. Y. (50).
- O'Connor, Haldeman, 13 North Front St., Harrisburg, Pa. (51). **H**
- Oestlund, Oscar W., Entomologist, State University, Minneapolis, Minn. (50). **F**
- Offinger, Martin H., M. E., Director Electro-Mech. Dept., Buffalo Commercial and Electro. Mech. Institute, Buffalo, N. Y. (50). **D**
- Ogden, Henry Vining, M. D., 141 Wisconsin St., Milwaukee, Wis. (51). **F K**
- *Ogden, Herbert G., U. S. C. and G. Survey, Washington, D. C. (38). 1891. **E**
- Ogden, Herbert Gouverneur, Jr., M. E., The Royalton Hotel, 44 W. 44th St., New York, N. Y. (50). **B D**
- Ogilvie, Miss Ida Helen, Sherman Square Hotel, New York, N. Y. (51). **E**
- Oglevee, Christopher S., Instructor in Biology, Lincoln College, Lincoln, Ill. (50). **F**
- O'Harra, Prof. Cleophas Cisney, State School of Mines, Rapid City, So. Dak. (49).
- Oldfield, Anthony M., M. D., Harbor Beach, Mich. (51). **K**
- Oliphant, F. H., Geologist of South Penn. Oil Co., Oil City, Pa. (51). **E**
- *Olive, Edgar W., University Museum, Harvard University, Cambridge, Mass. (48). 1903. **G**
- Olmsted, John Charles, Landscape Architect, 16 Warren St., Brookline, Mass. (50). **E I**
- Olsen, Tinius, Manufacturer, 500 N. 12th St., Philadelphia, Pa. (51). **D**
- Onderdonk, Henry U., M. D., Buffalo, Wyo. (51). **G K**
- Oothout, William, Chemist, Metallurgist and Mining Engineer, Santa Barbara, Cal. (50). **C D E**
- Opdyke, William S., 20 Nassau St., New York, N. Y. (49).
- *Orleman, Miss Daisy M., M. D., Peekskill Military Academy, Peekskill, N. Y. (40). 1897. **F**
- *Orleman, Col. Louis H., Ph. D., Principal Peekskill Military Academy, Peekskill, N. Y. (47). 1900.
- *Orr, William, Jr., 30 Firglade Ave., Springfield, Mass. (39). 1895, **B F**
- *Ortmann, Arnold Edward, Ph. D., Curator of Invertebrate Zoology and Paleontology, Carnegie Museum, Pittsburg, Pa. (51). 1903. **E**
- *Orton, Edward, Jr., The Normandie, Columbus, Ohio. (48). 1900. **E**

MEMBERS AND FELLOWS.

- *Orton, W. A., Div. of Veg. Phys. and Path., U. S. Dept. Agriculture, Washington, D. C. (49). **G**
- Osborn, Frederick A., Professor of Physics, Olivet Coll., Olivet, Mich. (50). **B**
- Osborn, H. L., Professor of Zoology, Hamline University, St Paul, Minn. (52). **F**
- *Osborn, Henry F., Columbia University, New York, N. Y. (29). 1883. **F**
- *Osborn, Herbert, Ohio State University, Columbus, Ohio. (32). 1884. **F**
- Osborne, Frank Russell, Professor of Physics, John B. Stetson University, DeLand, Fla. (50). **B**
- *Osborne, George Abbott, Professor of Mathematics, Mass. Inst. of Technology, Boston, Mass. (50). 1903. **A**
- Osborne, Loyall Allen, E. E., Mgr. of Works of Westinghouse Electric and Mfg. Co., Pittsburg, Pa. (50). **D**
- Osburn, Raymond Carroll, Department of Zoology, Columbia University, New York, N. Y. (50). **F**
- Osgood, Joseph B. F., Salem, Mass. (31).
- Osgood, Wilfred H., U. S. Department of Agriculture, Washington, D. C. (52). **F**
- *Osler, William, M. D., Johns Hopkins University, Baltimore, Md. (51). 1902. **F K**
- *Osmond, Prof. I. Thornton, State College, Pa. (33). 1889. **A B C**
- O'Sullivan, Rev. Denis T., S. J., 761 Harrison St., Boston, Mass. (40). **A B**
- Otis, Spencer, 903 Plymouth Building, Chicago, Ill. (51). **D**
- Overton, James Bertram, Ph. D., Professor of Biology, Illinois College, Jacksonville, Ill. (52). **G**
- *Owen, Charles Lorin, Field Columbian Museum, Chicago, Ill. (50). 1902. **H**
- Owen, Prof. D. A., Franklin, Ind. (34). **E**
- Owen, Frederick Denison, No. 3 Grant Place, Washington, D. C. (52). **D**
- Owen, Miss Juliette A., 306 N. Ninth St., St. Joseph, Mo. (50). **F**
- Owen, Miss Luella Agnes, 306 N. Ninth St., St. Joseph, Mo. (47). **E**
- Owen, Miss Mary Alicia, 306 N. Ninth St., St. Joseph, Mo. (50). **H**
- Owens, William Gundy, Professor of Chemistry and Physics, Bucknell University, Lewisburg, Pa. (50). **B C**
- *Packard, Dr. A. S., 115 Angell St., Providence, R. I. (16). 1875. **E F**
- Packard, George Arthur, Metallurgist and Mining Engineer, Baker City, Oregon. (50). **E**
- Packard, John C., 14 Searle Ave., Brookline, Mass. (48). **B**

MEMBERS AND FELLOWS.

- *Paddock, Wendell, Professor of Botany and Horticulture, Agricultural College, Fort Collins, Colo. (50). 1901. **G**
- PAGE, CLARENCE V., Civil and Mining Engineer, P. O. Box 922, Butte, Montana. (51). **D E**
- PAGE, DR. DUDLEY L., 46 Merrimack St., Lowell, Mass. (33). **F**
- Page, Logan Waller, Department of Agriculture, Washington, D. C. (52). **C**
- PAGE, MRS. NELLIE K., 46 Merrimack St., Lowell, Mass. (33). **F**
- *Paine, Cyrus F., 242 East Ave., Rochester, N. Y. (12). 1874. **A B**
- Paine, Robert Treat, President, Associated Charities of Boston, 6 Joy St., Boston, Mass. (50). **I**
- Painter, Charles Fairbank, M. D., 372 Mulboro St., Boston, Mass. (50). **F K**
- *Palache, Charles, University Museum, Cambridge, Mass. (44). 1896. **E**
- *Palmer, Prof. Albert De Forest, Brown University, Providence, R. I. (47). 1900. **B**
- *Palmer, Prof. Arthur William, 804 W. Green St., Urbana, Ill. (46). 1898. **C**
- *Palmer, Charles Skeelee, Ph. D., President, Colorado School of Mines, Golden, Colo. (50). 1901. **C**
- Palmer, Dr. Edward, Botanical Div., U. S. Dept. Agriculture, Washington, D. C. (22). **H**
- Palmer, Ezra, M. D., 2 Lincoln Hall, Trinity Court, Boston, Mass. (51). **K**
- Palmer, Irving A., Eiler's Plant, A. S. & R. Co., Pueblo, Colo. (52). **C**
- Palmer, Walter Keifer, Consulting Engineer, 401 New York Life Bldg., Kansas City, Mo. (47). **B D**
- Paltsits, Victor Hugo, Assistant Librarian, Lenox Library, New York, N. Y. (51). **H**
- *Pammel, Prof. L. H., Iowa Agricultural College, Ames, Ia. (39). 1892. **G**
- PARISH, HENRY, 52 Wall St., New York, N. Y. (49).
- *Park, Roswell, M. D., 510 Delaware Ave., Buffalo, N. Y. (45). 1901. **H K**
- *Park, William Hallock, M. D., 315 West 76th St., New York, N. Y. (51). 1903. **K**
- Parker, Charles V., Superintendent Public Schools, Trinidad, Colo. (52). **I**
- *Parker, Edward Wheeler, Statistician U. S. Geological Survey Washington, D. C. (52). 1903. **E**
- Parker, Miss Florence, 10340 Longwood Ave., Chicago, Ill. (50). **E**
- *Parker, George Howard, Assistant Professor of Zoology, Harvard University, Cambridge, Mass. (50). 1901. **F**

MEMBERS AND FELLOWS.

- Parker, Herman B., M. D., Vera Cruz, Mexico. (52). **K**
- *Parker, Herschel C., 21 Fort Greene Place, Brooklyn, N. Y. (43). 1900. **C**
- Parker, Horatio N., Biologist to Metropolitan Water Board, 456 Bloomfield Ave., Montclair, N. J. (50). **F**
- Parker, J. B., M. D., U. S. N., U. S. Naval Home, Philadelphia, Pa. (50). **K**
- Parker, Moses Greeley, M. D., 11 First St., Lowell, Mass. (47). **H**
- Parker, Richard Alexander, C. E., E. M., 4 P. O. Square, Boston, Mass. (50). **D E**
- Parker, William L., 312 Dartmouth St., Boston, Mass. (50).
- *PARKHURST, HENRY M., 173 Gates Ave., Brooklyn, N. Y. (23). 1874. **A**
- *Parks, C. Wellman, Civil Engineer, U. S. N., Navy Yard, Boston, Mass. (42). 1897.
- Parmelee, H. P., 508 Mich. Trust Bldg., Grand Rapids, Mich. (42). **E H**
- Parsell, Henry V. A., 31 E. 21st St., New York, N. Y. (49).
- *Parsons, Prof. Charles Lathrop, Durham, N. H. (41). 1896.
- Parsons, Mrs. Edwin, 326 W. 90th St., New York, N. Y. (50).
- Parsons, Francis H., 210 1st St., S.E., Washington, D. C. (52).
- PARSONS, JOHN E., 111 Broadway, New York, N. Y. (36).
- Pastorius, Charles Sharpless, Treasurer, Colo. Investment and Realty Co., P. O. Box 428, Colorado Springs, Colo. (51).
- *Paton, Stewart, M. D., 213 W. Monument St., Baltimore, Md. (50). 1902. **K**
- Patrick, Frank, 601 Kansas Ave., Topeka, Kansas. (50).
- *Patrick, Geo. E., U. S. Department Agriculture, Washington, D. C. (36). 1890. **C**
- PATTEN, JOHN, Patten Vacuum Ice Co. Ltd., 325 E. 97th St., New York, N. Y. (43).
- Patten, Miss Juliet, 2212 R St., N.W., Washington, D. C. (49). **C F G**
- Patterson, Andrew Henry, Prof. of Physics, Univ. of Georgia, Athens, Ga. (51). **B**
- Patterson, Dr. A. M., Instructor in Chemistry, Rose Polytechnic Institute, Terre Haute, Ind. (51). **C**
- Patterson, Mrs. Flora Wambaugh, U. S. Dept. Agriculture, Washington, D. C. (44). **G**
- *Patterson, George W., Jr., 814 S. University Ave., Ann Arbor, Mich. (44). 1896.
- *Patterson, Harry J., College Park, Md. (36). 1890. **C**
- Patterson, Prof. James L., Chestnut Hill, Philadelphia, Pa. (45).
- Pattison, Frank A., Consulting Electrical Engineer, 141 Broadway, New York, N. Y. (50). **D**

MEMBERS AND FELLOWS.

Patton, Arthur L., State Preparatory School, Boulder, Colo. (50).

B C

*Patton, Horace B., Professor of Geology and Mineralogy, Colorado School of Mines, Golden, Colo. (37). 1901. **E**

Patton, John, Counsellor-at-law, 925 Mich. Trust Co. Bldg., Grand Rapids, Mich. (50). **I**

*Paul, Henry M., 2015 Kalorama Ave., Washington, D. C. (33). 1885. **A B**

*Paulmier, Frederick Clark, N. Y. State Museum, Albany, N. Y. (47). 1901. **F**

Pawling, Jesse, Jr., Randal Morgan Laboratory of Physics, Univ. of Penna., Philadelphia, Pa. (50). **A B C D**

Peabody, George Foster, 28 Monroe Place, Brooklyn, N. Y. (50).

Peabody, Mrs. Lucy E., 1430 Corona St., Denver, Colo. (50). **H**

Peabody, Mary Brown, All Saints School, Sioux Falls, S. Dak. (52). **F G**

Pearce, James Edwin, Principal of High School, 309 W. 10th St., Austin, Texas. (51). **H**

Pearson, Fred. Stark, Consulting Engineer, Columbia Bldg. (Room 220), 29 Broadway, New York, N. Y. (50). **D**

*Pearson, Raymond A., Genl. Mgr., Walker-Gordon Lab. Co., 626 Madison Ave., New York, N. Y. (49). 1901. **F**

Pease, Miss Clara A., Public High School, Hartford, Conn. (47). **E**

Peck, Charles H., State Botanist, Albany, N. Y. (52). **G**

Peck, Frederick B., Lafayette College, Easton, Pa. (49).

Peck, Frederic W., M. D., Litchfield, Conn. (52). **K**

Peck, George, M. D., U. S. N., 926 North Broad St., Elizabeth, N. J. (51). **K**

Peck, Mrs. John Hudson, 3 Irving Place, Troy, N. Y. (28).

Peck, W. A., C. E., 1643 Champa St., Denver, Colo. (19). **E**

*Peckham, Wheeler H., 80 Broadway, New York, N. Y. (36). 1901. **I**

Pegram, George Braxton, Ph. D., Tutor in Physics, Columbia University, New York, N. Y. (52). **B**

*Peirce, Benjamin O., 305 Cabot St., Beverly, Mass. (47). 1898.

Peirce, Cyrus N., D. D. S., 3316 Powelton Ave., Philadelphia, Pa. (31). **F**

*Peirce, George James, Associate Professor of Plant Physiology, Stanford University, Cal. (44). 1897. **G**

Peirce, Harold, 222 Drexel Bldg., Philadelphia, Pa. (33). **H I**

Pell, Mrs. Alfred, Highland Falls, N. Y. (51).

Pendleton, Edward Waldo, 900 Union Trust Building, Detroit, Mich. (46). **H I**

Penfield, S. L., Professor of Mineralogy, Yale University, New Haven, Conn. (51). 1902. **E**

MEMBERS AND FELLOWS.

- Pennell, William W., M. D., Fredericktown, Ohio. (51). **K**
- Penniman, George H., 1071 Fifth Ave., New York, N. Y. (49).
- *Pennington, Miss Mary Engle, Ph. D., 3908 Walnut St., Philadelphia, Pa. (47). 1900. **C F G**
- Penrose, Charles B., M. D., 1720 Spruce St., Philadelphia, Pa. (51). **B K**
- *PENROSE, DR. R. A. F., JR., Ph. D., 460 Bullitt Building, Philadelphia, Pa. (38). 1890. **E**
- *Pepper, George H., Amer. Mus. Nat. History, Central Park, New York, N. Y. (48). 1900. **H**
- Perkins, Albert S., Teacher of Chemistry, Dorchester High School, 75 Milton Ave., Hyde Park, Mass. (50). **C**
- PERKINS, ARTHUR, 14 State St., Hartford, Conn. (31). **A B**
- *Perkins, Prof. Charles Albert, University of Tennessee, Knoxville, Tenn. (47). 1900. **B D**
- Perkins, Edmund Taylor, U. S. Geological Survey, Washington, D. C. (52). **E**
- Perkins, Frank Walley, Asst. Supt., U. S. Coast and Geodetic Survey, Washington, D. C. (52). **B**
- *Perkins, Prof. George H., Burlington, Vt. (17). 1882. **E F H**
- Perkins, Henry Farnham, Ph. D., University of Vermont, Burlington, Vt. (52). **F**
- Perkins, John Walter, M. D., 423 Altman Building, Kansas City, Mo. (51). **K**
- *PERRINE, C. D., Asst. Astronomer, Lick Observatory, Mt. Hamilton, Cal. (51). 1903. **A**
- Perrine, Miss Lura L., State Normal School, Valley City, No. Dak. (47). **E F G H**
- *Perry, Arthur C., 226 Halsey St., Brooklyn, N. Y. (43). 1896. **A B**
- Perry, Thomas Sergeant, Author, 312 Marlborough St., Back Bay, Boston, Mass. (50).
- Peskind, Arnold, M. D., 1354 Willson Ave., Cleveland, Ohio. (51). **K**
- Peters, Clayton A., Polytechnic Preparatory School, 13th Ave. and 56th St., Brooklyn, N. Y. (46). **G**
- *Peters, Edw. T., 81 Constantine Road, Hampsted, N. W., London, England. (33). 1889. **I**
- Peterson, Dr. C. A., 715 Century Building, St. Louis, Mo. (52). **H**
- Petersen, Niels Frederick, Plainview, Neb. (50). **I**
- Peterson, Bertel, Genl. Mgr. Grand Central Mining Co., Ltd., Torres, Sonora, Mexico. (50). **D**
- *Peterson, Frederick, M. D., 4 W. 50th St., New York, N. Y. (49). 1901. **K**
- Peterson, Sidney, Brighton High School, Boston, Mass. (50). **C G**

MEMBERS AND FELLOWS.

- Pétre, Axel, P. O. Box 1606, Philadelphia, Pa. (48). **D**
- Pettee, Charles Holmes, Durham, N. H. (47). **A**
- Pettee, Rev. J. T., Meriden, Conn. (39). **I**
- *Pettee, Prof. Wm. H., Professor of Mineralogy, University of Michigan, Ann Arbor, Mich. (24). 1875. **E**
- Pettegrew, David Lyman, P. O. Box 75, Worcester, Mass. (44). **A**
- Pettersen, C. A., 2395 Lowell Ave., Chicago, Ill. (52).
- Pettis, Clifford R., care Forest, Fish and Game Com., Albany, N. Y. (52). **G**
- Phelps, William Joshua, Mgr. The Phelps Co., Detroit, Mich. (50). **D I K**
- Philips, Ferdinand, of Philips, Townsend & Co., Manufacturers, 505 N. 21st St., Philadelphia, Pa. (51). **D**
- *Phillips, Prof. Andrew W., 209 York St., New Haven, Conn. (24). 1879.
- *PHILLIPS, PROF. FRANCIS C., Box 126, Allegheny, Pa. (36). 1899. **C**
- Phillips, John C., 299 Berkley St., Boston, Mass. (52.)
- Phillips, John Lloyd, Assistant State Entomologist, Blacksburg, Va. (52). **F**
- Phillips, John S., 141 E. 25th St., New York, N. Y. (46).
- PHIPPS, LAWRENCE COWLE, Farmers' Bank Bldg., Pittsburg, Pa. (51). **D**
- Pickel, Frank Welborn, Prof. of Biology, Univ. of Arkansas, Fayetteville, Ark. (71). **G**
- *Pickering, Prof. Edward C., Director of Harvard Observatory, Cambridge, Mass. (18). 1875. **A B**
- Pickett, Dr. Thomas E., Maysville, Ky. (25). **F H**
- Pickett, William Douglas, Four Bear, Big Horn Co., Wyoming. (41). **D I**
- *PIERCE, NEWTON B., Pacific Coast Laboratory, U. S. Dept. Agriculture, Santa Ana, Cal. (49). 1901. **G**
- *Pierce, Perry Benjamin, U. S. Patent Office, Washington, D. C. (40). 1895. **H**
- Pierce, Sloan J., R. F. D., No. 4, Warren, Ohio. (50). **E**
- PIERREPONT, HENRY E., 216 Columbia Heights, Brooklyn, N. Y. (43).
- *Piersol, George A., Professor of Anatomy, University of Pennsylvania, Philadelphia, Pa. (50). 1902. **K**
- Pietrzycki, Marcel, M. D., Starbuck, Wash. (51). **I**
- Pilcher, James Evelyn, Ph. D., Professor of Sociology and Economics, Dickinson College, Carlisle, Pa. (50). **I**
- Pilling, J. W., 1301 Massachusetts Ave., N.W., Washington, D. C. (40).
- *Pillsbury, J. E., Captain U. S. N., General Board, Navy Dept., Washington, D. C. (33). 1898. **B E**

MEMBERS AND FELLOWS.

- *Pillsbury, John H., Prin. of Waban School, Waban, Mass. (23). 1885. **F H**
- *Pinchot, Gifford, Forester, U. S. Dept. Agriculture, Washington, D. C. (47). 1899. **G**
- Pinchot, J. W., 1615 Rhode Island Ave. N.W., Washington, D. C. (50). **G**
- Pinkerton, Andrew, Electrical Engineer, Vandergrift, Pa. (50). **D**
- Pinney, Mrs. Augusta Robinson, 350 Central St., Springfield, Mass. (44). **F G**
- Pitkin, Lucius, 47 Fulton St., New York, N. Y. (29).
- Pitner, Thomas J., M. D., Trustee Illinois College, Jacksonville, Ill. (51). **K**
- Pitts, Thomas Dorsey, Naval Architect and Engineer, 90 Halsey St., Brooklyn, N. Y. (51). **D**
- Plant, Albert, 28 East 76th St., New York, N. Y. (50).
- Plapp, Frederick Wm., 2549 N. 42d Ave., Irving Park Sta., Chicago, Ill. (52).
- Platt, Hon. Thomas C., United States Senator, 49 Broadway, New York, N. Y. (49).
- Platt, Walter B., M. D., 802 Cathedral St., Baltimore, Md. (50). **K**
- Plimpton, George Arthur, 70 5th Ave., New York, N. Y. (47).
- Plowman, Amon Benton, Greenville, Ohio. (50). **B**
- *Pohlman, Dr. Julius, 404 Franklin St., Buffalo, N. Y. (32). 1884. **E F**
- Pole, Arminius C., M. D., 2038 Madison Ave., Baltimore, Md. (51). **K**
- *Pollard, Charles Louis, Springfield, Mass. (44). 1899. **G**
- Pollock, Horatio M., Ph. D., N. Y. State Civil Service Commission, Albany, N. Y. (50). **F**
- Pomeroy, Charles Taylor, 55 Broad St., Newark, N. J. (43).
- *Pond, G. Gilbert, Ph. D., Professor of Chemistry, State College, Pa. (51). 1903. **C**
- Pond, Raymond Haines, Ph. D., Northwestern University Bldg., S.E. cor. Lake and Dearborn Sts., Chicago, Ill. (52). **G**
- Poor, John Merrill, Professor of Astronomy, Dartmouth College, Hanover, N. H. (52). **A**
- Porteous, John, 48 St. Stephen St., Boston, Mass. (22).
- Porter, Miss Caroline Johnson, The Western College, Oxford, Ohio. (52).
- Porter, Miss Edna, 94 Russell Ave., Buffalo, N. Y. (41). **F G**
- Porter, Fred. B., 4911 Champlain Ave., Chicago, Ill. (52). **C**
- Porter, H. Hobart, Jr., Consulting Electrical and Mechanical Engineer, 31 Nassau St., New York, N. Y. (50). **D**
- Porter, Henry K., Trustee of Carnegie Institute, 541 Wood St., Pittsburg, Pa. (50). **D**

MEMBERS AND FELLOWS.

- Porter, J. Edward, Mfg. Chemist and Analyst, 8 Clinton Block, Syracuse, N. Y. (50). **C**
- Porter, Miles F., M. D., 207 W. Wayne St., Ft. Wayne, Ind. (51). **K**
- *Porter, W. Townsend, M. D., Assistant Professor of Physiology, Harvard Medical School, Boston, Mass. (50). 1901. **K**
- Posse, Baroness Rose, Posse Gymnasium, 206 Massachusetts Ave., Boston, Mass. (52).
- *Post, Charles A., Bayport, Long Island, N. Y. (49). 1901. **A**
- Post, Walter A., General Superintendent, Newport News Shipbuilding and Dry-dock Co., Newport News, Va. (51). **D**
- Poteat, Wm. L., Wake Forest, N. C. (47). **F**
- Potter, Mrs. Henry C., 347 W. 89th St., New York, N. Y. (49).
- Potter, Richard B., M. D., West Palm Beach, Fla. (51). **K**
- Potter, William Bancroft, Chief Engineer, Ry. Dept. G. E. Co., Schenectady, N. Y. (50). **D**
- Potter, William Plumer, Justice Supreme Court of Pennsylvania, 304 St. Clair St., Pittsburg, Pa. (51). **I**
- Powel, Colonel de Veaux, 28 Broadway, New York, N. Y. (50).
- Powell, James, Mechanical Engineer, 2525 Spring Grove Ave., Cincinnati, Ohio. (51). **D**
- Powell, Thomas, M. D., 215-217 Laughlin Bldg., Los Angeles, Cal. (41).
- *Power, Frederick B., Ph. D., Director, The Wellcome Research Laboratories, 6 King St., Snow Hill, London, E. C., England. (31). 1887. **C**
- *Powers, Le Grand, 3007 13th St. N.W., Washington, D. C. (51). 1902. **I**
- Prang, Louis, 45 Centre St., Roxbury, Mass. (29). **D**
- Prather, John McClellan, Ph. D., Instructor in Biology, St. Louis, High School, St. Louis, Mo. (52). **F**
- Prather, Wm. L., Ph. D., President of the University of Texas, Austin, Texas. (50). **I**
- Pratt, Alexander, Jr., Ph. D., 26 Bunnell St., Bridgeport, Conn. (50). **H I**
- Pratt, Chas. W., Supt. City Schools, Augusta, Kans. (50). **F**
- *Pratt, Joseph Hyde, Ph. D., 74 Broadway, New York, N. Y. (49). 1902. **E**
- Préfontaine, Louis A., M. D., 317 Main St., Springfield, Mass. (52). **K**
- Prentiss, Daniel Webster, M. D., 1101 14th St. N. W., Washington, D. C. (50). **F K**
- *Prentiss, Robert W., Professor of Mathematics and Astronomy, Rutgers College, New Brunswick, N. J. (40). 1891. **A**
- *Prescott, Prof. Albert B., Ann Arbor, Mich. (23). 1875. **C**
- Prescott, Samuel Cate, Instructor in Biology, Mass. Inst. Tech., Boston, Mass. (51). **K**

MEMBERS AND FELLOWS.

- Price, Harvey Lee, Blacksburg, Va. (52). **G**
- Price, Robert Henderson, Willow View Farm, Long's Shop, Va. (50). **F G**
- Price, Thomas Malcolm, Bureau of Animal Industry, Dept. of Agriculture, Washington, D. C. (50). **C**
- Price, Weston A. V., 2238 Euclid Ave., Cleveland, Ohio. (48). **B C**
- Prince, J. Dyneley, 15 Lexington Ave., New York, N. Y. (49).
- Pritchard, Myron T., 125 School St., Roxbury, Mass. (52). **E I**
- Pritchard, Samuel Reynolds, Blacksburg, Va. (47). **D**
- Pritchard, William Broadbuss, M. D., 105 W. 73d St., New York, N. Y. (51). **K**
- *Prichett, Henry S., President Mass. Inst. Technology, Boston, Mass. (29). 1881. **A**
- Probasco, John Buck, M. D., 175 E. Front St., Plainfield, N. J. (51). **K**
- *Prosser, Charles S., Ohio State Univ., Columbus, Ohio. (33). 1891. **E F**
- Proudfit, Alexander Couper, 40 Wall St., New York, N. Y. (47).
- PRUYN, JOHN V. L., JR., Albany, N. Y. (29).
- Pryer, Charles, New Rochelle, N. Y. (49).
- Puffer, William L., 198 Mt. Vernon St., West Newton, Mass. (50). **D**
- Pulsifer, Mrs. C. L. B., Nonquitt, Mass. (33).
- *Pulsifer, Wm. H., Nonquitt, Mass. (26). 1879. **A H**
- *Pupin, Dr. M. I., Columbia University, New York, N. Y. (44). 1896. **B**
- Purdue, Albert Homer, Professor of Geology, University of Arkansas, Fayetteville, Ark. (50). **E**
- Puryear, Chas., Professor of Mathematics, Agric. and Mech. College, College Station, Tex. (51). **A**
- Pusey, Charles W., M. E., President The Pusey & Jones Co., Wilmington, Del. (51). **D**
- Putnam, Chas. P., M. D., 63 Marlborough St., Boston, Mass. (28).
- Putnam, Miss Elizabeth D., 2013 Brady St., Davenport, Iowa. (45).
- *Putnam, Prof. F. W., Peabody Museum, Cambridge, Mass. (10). 1874. **H**
- Putnam, Henry St. Clair, Davenport, Iowa. (47).
- Pyle, Miss Effie B., Principal of High School, Coldwater, Kansas. (51). **B C**
- Quackenbos, John D., M. D., 331 W. 28th St., New York, N. Y. (49).
- *Quaintance, A. L., U. S. Department of Agriculture, Washington D. C. (51). 1903. **F**
- Quinn, John James, Warren, Pa. (52).

MEMBERS AND FELLOWS.

- Quintard, Edward A., Sewanee, Tenn., Supt. of Mines at Batopilas, Mexico. (50). **E**
- Quiroga, Modesto, 127 W. 11th Ave., Columbus, Ohio. (52).
- Radin, Paul, 347 East 116th St., New York, N. Y. (52). **F K**
- *Ramaley, Francis, University of Colorado, Boulder, Colo. (45). 1899. **G**
- Ramsey, Miss Mary C., Shoshone Agency, Wyoming. (52). **H**
- Ramsey, Rolla Roy, 1002 Lowrey St., Columbia, Mo. (50). **B**
- Rand, C. F., M. D., 1228 15th St. N.W., Washington, D. C. (27). **E H**
- Rand, Herbert Wilbur, Ph. D., Instructor in Zoology, Harvard University, Cambridge, Mass. (51). **F**
- Randall, Burton Alexander, M. D., 1717 Locust St., Philadelphia, Pa. (51). **K**
- Randall, John E., Superintendent and Electrical Engineer, Columbia Inc. Lamp Co., St. Louis, Mo. (50). **D**
- Randolph, Beverley S., Mining Supt. Consolidation Coal Co., Frostburg, Md. (50). **D E**
- Randolph, Prof. L. S., Blacksburg, Va. (33). **D**
- *Rane, Frank Wm., New Hampshire Agric. Exper. Station, Durham, N. H. (42). 1900. **G**
- Rankin, J. M., Atlantic Building, Washington, D. C. (52). **I**
- Rankin, Walter M., Professor of Invertebrate Zoology, Princeton University, Princeton, N. J. (51). **F**
- Ransohoff, Joseph, M. D., Cincinnati, Ohio. (51). **K**
- Ransome, Ernest Leslie, Concrete Engineer, Westervelt and 4th Ave., New Brighton, Staten Island, N. Y. (51). **D**
- *Ransome, Frederick Leslie, Ph. D., U. S. Geological Survey, Washington, D. C. (52). 1903. **E**
- Rathbun, Miss Mary Jane, Smithsonian Institution, Washington, D. C. (52). **F**
- *Rathbun, Richard, Smithsonian Institution, Washington, D. C. (40). 1892. **F**
- Rau, Albert George, Principal Moravian Parochial School, 63 Broad St., Bethlehem, Pa. (50). **B E**
- Raymer, George Sharp, E. M., Instructor in Mining, Harvard University, Cambridge, Mass. (50). **D E**
- *Raymond, Rossiter W., 99 John St., New York, N. Y. (15). 1875. **E I**
- *Raymond, William G., Rensselaer Polytechnic Institute, Troy, N. Y. (44). 1896. **D**
- Reagan, Albert B., 327 S. Lincoln St., Bloomington, Ill. (53). **E**
- Reber, Samuel, Lieut. Col. U. S. A., Signal Corps, Headquarters of the Army, Washington, D. C. (50). **D**
- Rèche, Miss Eugénie M., 31 Howell St., Rochester, N. Y. (41). **E H**

MEMBERS AND FELLOWS.

- Reckefus, Chas. H., Jr., M. D., 506 N. 6th St., Philadelphia, Pa. (51). **K**
- Red, Samuel Clark, M. D., Houston, Texas. (51). **K**
- Redding, Allen C., Tybo, Nevada. (39). **C**
- Redfield, William C., Commissioner of Public Works, Borough Hall, Brooklyn, N. Y. (44). **D**
- Reed, Charles J., 3313 N. 16th St., Philadelphia, Pa. (34). **B C**
- Reed, Hon. James H., Amberson Ave., Pittsburg, Pa. (51). **I**
- *Reed, John O., 907 Lincoln Ave., Ann Arbor, Mich. (44). 1898. **B**
- *Rees, Prof. John K., Columbia University, New York, N. Y. (26). 1878. **A B E**
- Reese, Albert Moore, Ph. D., Syracuse University, Syracuse, N. Y. (52). **F**
- *Reese, Charles L., 1020 Jackson St., Wilmington, Del. (39). 1892. **C**
- Reese, Herbert M., Yerkes Observatory, Williams Bay, Wis. (49). **B**
- *Reese, Jacob, 400 Chestnut St., Philadelphia, Pa. (33). 1891. **B D**
- *Reid, Harry Fielding, Johns Hopkins University, Baltimore, Md. (36). 1893. **B**
- *Reid, Hon. Whitelaw, 451 Madison Ave., New York, N. Y. (50). 1901. **I**
- Reifsnnyder, Samuel K., High School, Ocean Grove, N. J. (50). **I**
- Reighard, Jacob, Prof. of Zoology, Univ. of Michigan, Ann Arbor, Mich. (51). **F**
- Reist, Henry G., Mechanical and Electrical Engineer, 5 South Church St., Schenectady, N. Y. (50). **D**
- *Remsen, Ira, President Johns Hopkins University, Baltimore, Md. (22). 1875. **C**
- Renninger, John S., M. D., Marshall, Minn. (31). **C F**
- Replogle, Mark A., M. E., Hydraulic Engineer, 111 S. Walnut St., Akron, Ohio. (51). **D**
- *Reuter, Dr. Ludwig H., 443 East 87th St., New York, N. Y. (46). 1898. **C**
- Reynolds, Dudley Sharpe, M. D., 304 W. Chestnut St., Louisville, Ky. (50). **K**
- Reynolds, George, P. O. Box B, Salt Lake City, Utah. (44). **H**
- RHODES, JAMES FORD, Author and Historian, 392 Beacon St., Boston, Mass. (50). **I**
- Rice, Calvin Winsor, Consulting Engineer, General Electric Co., 44 Broad St., New York City. (51). **B D**
- Rice, Edward L., A. B., Ohio Wesleyan University, Delaware, Ohio. (43). **F**
- Rice, Edwin Wilbur, Jr., General Electric Co., Schenectady, N. Y. (50). **D**
- Rice, John Ainsworth, Mining Engineer, Bland, New Mexico. (50). **D E**

MEMBERS AND FELLOWS.

- Rice, Martin Everett, Asst. Professor of Physics and Electrical Engineering, University of Kansas, Lawrence, Kans. (50). **B D**
- *Rice, Prof. W. North, Wesleyan University, Middletown, Conn. (18). 1874. **E F**
- Rich, Michael P., M. D., 50 W. 38th St., New York, N. Y. (40).
- Richard, Montrose R., M. D., 77 E. 116th St., New York, N. Y. (51). **K**
- *Richards, Charles B., 237 Edwards St., New Haven, Conn. (33). 1885. **D**
- *RICHARDS, EDGAR, 341 W. 88th St., New York, N. Y. (31). 1886. **C**
- *Richards, Herbert Maule, Ph. D., Instructor in Botany, Barnard College, Columbia University, New York, N. Y. (51). 1902. **G**
- *Richards, Prof. Robert H., Mass. Institute of Technology, Boston, Mass. (22). 1875. **D**
- *Richards, Mrs. Robert H., Mass. Institute of Technology, Boston, Mass. (23). 1878. **C**
- *Richards, Prof. Theodore William, Harvard University, Cambridge, Mass. (47). 1899.
- Richardson, Major Charles A., Canandaigua, N. Y. (50). **I**
- Richardson, Prof. Charles Henry, Ph. D., Dartmouth College, Hanover, N. H. (47). **E**
- Richardson, Dr. Charles Williamson, 1102 L St. N.W., Washington, D. C. (49).
- *Richardson, Clifford, Barber Asphalt Paving Co., Long Island City, N. Y. (30). 1884. **C**
- *Richardson, Miss Harriet, Smithsonian Institution, Washington, D. C. (49). 1903. **F**
- Richardson, Leon B., Instructor in Chemistry, Dartmouth College, Hanover, N. H. (52). **C**
- *Richardson, Mark Wyman, M. D., 90 Equitable Building, Boston, Mass. (51). 1903. **K**
- Richardson, Wm. D., P. O. Box 185, Fredericksburg, Va. (52). **C F**
- Richmond, William Henry, 3425 North Main Ave., Scranton, Pa. (50). **E**
- Rickard, T. A., Editor of "The Engineering and Mining Journal," 261 Broadway, New York, N. Y. (50). **D E**
- Ricker, Maurice, Principal of High School, Burlington, Iowa. (50). **F**
- Ricker, N. Clifford, Dean of the College of Engineering, University of Illinois, Urbana, Ill. (50). **D**
- Ricker, Percy Leroy, Department of Agriculture, Washington, D. C. (52). **G**
- Ricketts, Louis D., Consulting Mining Engineer, 99 John St., New York, N. Y. (50). **D E**

MEMBERS AND FELLOWS.

*Ricketts, Prof. Palmer C., 30 Second St., Troy, N. Y. (33). 1887.

A D

*Ricketts, Prof. Pierre de Peyster, 104 John St., New York, N. Y. (26). 1880. **C D E**

Ricketts, Col. R. Bruce, Wilkesbarre, Pa. (33). **E**

Riddell, John, Mechanical Superintendent, General Electric Co., 1132 State St., Schenectady, N. Y. (51). **D**

Riddle, Lincoln Ware, Roanoke Ave., Jamaica Plain, Mass. (52).

G

Riddle, Lumina C., 160 West Fifth Ave., Columbus, Ohio. (48). **G**

Riederer, Emil Justus, care Welsbach Light Co., Gloucester City, N. J. (52). **C**

Ries, Elias E., E. E., 116 Nassau St., New York, N. Y. (33). **B D**

*Ries, Heinrich, Ph. B., Ithaca, N. Y. (41). 1898. **E**

Riesman, David, M. D., 326 S. 16th St., Philadelphia, Pa. (51). **K**

Rietz, Henry Lewis, University of Indianapolis, Indianapolis, Ind. (51). **A**

*Riggs, Robert Baird, Ph. B., Professor of Chemistry, Trinity College, Hartford, Conn. (50). 1901. **C**

Riggs, Walter Merritt, Professor of Electrical Engineering, Clemson College, S. C. (50). **B D**

Riker, Clarence B., Maplewood, N. J. (52). **F**

Riker, Samuel, 27 E. 69th St., New York, N. Y. (50).

Riley, Isaac Woodbridge, Ph. D., Professor of Philosophy and Pol. Economy, University of New Brunswick, Fredericton, New Brunswick, Canada. (52). **H I**

Riley, Mrs. Matilda E., Art Director, St. Louis Public Schools, Board of Education Building, St. Louis, Mo. (53).

Rissmann, Otto, General Manager Cherokee-Lanyon Spelter Co., Iola, Kan. (50). **D E**

Ritchie, Craig D., Conveyancer, 414 N. 34th St., Philadelphia, Pa. (51).

*Ritter, William Emerson, Associate Professor of Zoology, University of California, Berkeley, Cal. (50). 1901. **F**

Robb, Hunter, M. D., 702 Rose Building, Cleveland, Ohio. (51). **K**

Robb, J. Hampden, 23 Park Ave., New York, N. Y. (50).

Robbins, Fred. W., Superintendent of Schools, Bethlehem, Pa. (50). **I**

Robert, Dr. J. C.. A. and M. College, Agricultural College, Miss. (51).

Roberts, H. L., Department of Biology, Western Illinois State Normal School, Macomb, Ill. (52). **F**

Roberts, Miss Jennie B., 231 William St., Port Chester, N. Y. (43).

Roberts, John M., Principal, High School, and Instructor in Science, Marshall, Mo. (50). **F G**

MEMBERS AND FELLOWS.

- Roberts, Milnor, Professor of Mining and Metallurgy, University of Washington, Seattle, Wash. (50). **D E**
- Roberts, Thomas Paschali, Civil Engineer, 361 North Craig St., Pittsburg, Pa. (51). **D**
- Roberts, Rev. William C., D. D., LL.D., President of Central University, Danville, Ky. (50).
- Roberts, Wm. F., 730 15th St., Washington, D. C. (52). **F I**
- Robins, Wm. Littleton, M. D., 1700 13th St., N.W., Washington, D. C. (52). **K**
- *Robinson, Benjamin Lincoln, Curator Harvard Herbarium, Cambridge, Mass. (41). 1893. **G**
- Robinson, Charles Dwight, Newburgh, N. Y. (50). **I**
- *Robinson, Prof. Franklin C., Bowdoin College, Brunswick, Me. (29). 1889. **C D**
- *Robinson, Otis Hall, Professor of Natural Philosophy, University of Rochester, Rochester, N. Y. (23). 1901. **A B**
- Robinson, Samuel Adams, M. D., 135 North 22d St., Portland, Oregon. (51). **H I K**
- Robinson, Sanford, C. E., E. M., Steeple Rock, New Mexico. (50). **D**
- *Robinson, Prof. Stillman W., 1353 Highland St., Columbus, Ohio. (30). 1883. **A B D**
- Rochester, DeLancey, M. D., 469 Franklin St., Buffalo, N. Y. (35). **F**
- Rockey, A. E., M. D., 778 Flanders St., Portland, Oregon. (51). **K**
- *Rockwell, Gen. Alfred P., Manchester, Mass. (10). 1882. **E**
- Rockwood, Charles G., 70 South 11th St., Newark, N. J. (36).
- *Rockwood, Prof. Charles G., Jr., 34 Bayard Lane, Princeton, N. J. (20). 1874. **A B D E**
- Rockwood, Elbert W., Professor of Chemistry and Toxicology, College of Medicine, State University of Iowa, Iowa City, Iowa. (50). **C K**
- Rodman, Charles S., M. D., Waterbury, Conn. (51). **K**
- Roe, Edward Drake, Jr., Professor of Mathematics, Syracuse University, Syracuse, N. Y. (50). **A**
- Roessler, Franz, 39 High St., Perth Amboy, N. J. (39).
- Rogers, Miss Anne Fuller, 126 Newbury St., Boston, Mass. (52). **F**
- Rogers, Arthur Curtis, M. D., Supt. Minn. School for Feeble Minded, Faribault, Minn. (51). **K**
- Rogers, Edward L., 71 Broadway, New York, N. Y. (50).
- Rogers, Howard J., Chief of Department of Education and Director of International Congresses, Universal Exposition, St. Louis, Mo. (52).
- Rogers, John T., M. D., 5th and St. Peter Sts., "Lowry Arcade," St. Paul, Minn. (51). **K**

MEMBERS AND FELLOWS

- *Rolfs, Peter H., Tropical Laboratory U. S. Department Agriculture, Miami, Fla. (41). 1899. **G**
- Rollins, William Herbert, M. D., 250 Marlborough St., Boston, Mass. (50). **B K**
- *Rominger, Dr. Carl, Ann Arbor, Mich. (21). 1879. **E**
- Roney, Wm. R., Mechanical Engineer, 10 Bridge St., New York, N. Y. (51). **D**
- *Root, Hon. Elihu, Secretary of War, Washington, D. C. (50). 1901.
I
- Rorer, James Birch, 1460 Staughton St., Washington, D. C. (51). **G**
- Rorer, Jonathan T., Ph. D., Central High School, Philadelphia, Pa. (47).
- *Rosa, Edward Bennett, National Bureau of Standards, Washington, D. C. (39). 1892. **A B**
- Rose, Joseph Nelson, U. S. National Museum, Washington, D. C. (52). **G**
- Rose, Lewis H., Associate Prof., Chemistry and Physics, Univ. of Arkansas, Fayetteville, Ark. (52). **B C**
- Rosenau, Milton J., M. D., Director Hygienic Laboratory, U. S. Public Health and Marine Hospital Service, Washington, D. C. (51). **K**
- Rosenthal, Edwin, M. D., 517 Pine St., Philadelphia, Pa. (51). **K**
- Ross, Bennett Battle, Professor of Chemistry, Alabama Polytechnic Institute, Auburn, Ala. (45). **C**
- Ross, Denman Waldo, Ph. D., 24 Craigie St., Cambridge, Mass. (29).
- Ross, F. G., Civil Engineer, Farmers' Bank Building, Pittsburg, Pa. (51). **D**
- *Rotch, A. Lawrence, Director of Blue Hill Meteorological Observatory, Hyde Park, Mass. (39). 1896. **B**
- Rotch, T. M., M. D., 197 Commonwealth Ave., Boston, Mass. (51).
K
- Roth, Filibert, U. S. Dept. of Agriculture, Washington, D. C. (39). **F**
- Rothe, Wm. G., 226 Stuyvesant Ave., Brooklyn, N. Y. (43).
- Rothermel, John J., Teacher of Physics, Eastern High School, Washington, D. C. (51). **B**
- Rothschild, Jacob, Hotel Majestic, New York, N. Y. (50).
- Rotzell, W. E., M. D., Narberth, Pa. (45). **F H**
- Rowe, Jesse Perry, Head of the Department of Physics and Geology, University of Montana, Missoula, Montana. (52).
B E
- *Rowlee, W. W., Cornell Univ., Ithaca, N. Y. (41). 1894. **G**
- Roy, Arthur J., C. E., First Assistant, Dudley Observatory, Albany, N. Y. (50). **A**
- Rucker, Miss Augusta, University of Texas, Austin, Texas. (51).

MEMBERS AND FELLOWS.

- Ruddick, William H., M. D., So. Boston, Mass. (51). **F K**
- Ruedemann, Rudolf, Ph. D., Paleontologist New York State Museum, 161 Yates St., Albany, N. Y. (52). **E F**
- Ruete, Otto M., Ph. D., Analytical and Consulting Chemist, 721 Bluff St., Dubuque, Iowa. (51). **C E**
- Ruffin, Sterling, M. D., Professor of Theory and Practice of Medicine, Columbian University, 1023 Vermont Ave., Washington, D. C. (52). **K**
- Ruland, Frederick D., M. D., Westport, Conn. (51). **B C K**
- Ruland, M. A., 53 Linden Ave., Flatbush, Brooklyn, N. Y. (43).
- Running, Theodore R., Ph. D., 935 Greenwood Ave., Ann Arbor, Mich. (50). **A**
- Runyon, William Henry, Teacher of Science, Lyons Township High School, La Grange, Ill. (50). **B F**
- Rupp, August, A. B., College of City of New York, New York, N. Y. (35).
- Ruppersberg, Miss Emma A., 842 South High St., Columbus, Ohio. (48). **B**
- *Rusby, Henry H., M. D., 115 West 68th St., New York, N. Y. (36). 1890. **G**
- Russak, Frank, 19 East 65th St., New York, N. Y. (50). **I**
- Russell, A. H., Lieut. Col. U. S. A., Chief Ordnance Officer, Div. of Philippines, Manila, P. I. (38). **D**
- Russell, Herbert Edwin, Professor of Mathematics, University of Denver, University Park, Colo. (50). **A**
- *Russell, Prof. H. L., University of Wisconsin, Madison, Wis. (41). 1894. **G**
- *Russell, Israel C., University of Michigan, Ann Arbor, Mich. (25). 1882. **E**
- *Russell, James E., Dean of Teachers' College, West 120th St., New York, N. Y. (50). 1901. **H I**
- Russell, John B., Superintendent of Schools, Wheaton, Ill. (51). **C**
- *Rutter, Frank Roy, Ph. D., U. S. Dept. Agriculture, Washington, D. C. (47). 1900. **I**
- *Ryan, Harris J., Cornell University, Ithaca, N. Y. (38). 1890. **B**
- *Rydberg, Dr. Per Axel, N. Y. Botanical Garden, Bronx Park, New York, N. Y. (49). 1901. **G**
- *Sabine, Wallace Clement, 40 Shepard St., Cambridge, Mass. (47). 1900. **B**
- *Sachs, B., M. D., 21 E. 65th St., New York, N. Y. (49). 1903. **K**
- Sackett, Miss Eliza D., Cranford, N. J. (35). **F H**
- Sackett, Robert L., C. E., Professor of Applied Mathematics and Astronomy, Earlham College, Richmond, Ind. (50). **A**
- Sackett, Walter George, Baptist Female University, Raleigh, N. C. (52). **F G**

MEMBERS AND FELLOWS.

- Sadtler, Saml. P., Ph. D., LL.D., Consulting Chemist, N. E. corner Tenth and Chestnut Sts., Philadelphia, Pa. (51). **C**
- *Saegmuller, G. N., 132 Maryland Ave., S.W., Washington, D. C. (38). 1891. **A B**
- Sage, John Hall, Portland, Conn. (23). **F**
- Sager, Fred. Anson, Asst. Professor of Physics, University of Illinois, Urbana, Ill. (50). **B**
- *St. John, Prof. Charles E., 125 Elm St., Oberlin, Ohio. (46). 1900. **B**
- St. John, Howell W., P. O. Box 913, Hartford, Conn. (49). **I**
- Salathé, Frederick, Ph. D., General Superintendent, Penna. Oil & Gas Co., Casper, Wyoming. (51). **C**
- *Salisbury, Prof. R. D., Chicago University, Chicago, Ill. (37). 1890. **B E**
- *Salmon, Daniel E., U. S. Dept. Agriculture, Washington, D. C. (31). 1885. **F**
- Sander, Dr. Enno, St. Louis, Mo. (27). **C**
- Sanderson, E. Dwight, Prof. of Entomology, Agric. and Mech. College, College Station, Texas. (50). **F**
- Sando, Will J., Manager International Steam Pump Co., 120 Liberty St., New York, N. Y. (51). **E**
- Sands, Wm. Hupp, M. D., Fairmont, W. Va. (51). **K**
- Sanes, K. I., M. D., 1636 5th Ave., Pittsburg, Pa. (51). **K**
- *Sanford, E. C., Professor of Psychology, Clark University, Worcester, Mass. (49). 1902. **H I**
- *Sanford, Fernando, Professor of Physics, Stanford University, Cal. (50). 1901. **B**
- Sardeson, Frederick William, Ph. D., Instructor in Geology, University of Minnesota, Minneapolis, Minn. (50). **E**
- Sargent, Miss Annie B., Bellwood, Pa. (52). **F**
- Sargent, Ara Nathaniel, M. D., 116 Federal St., Salem, Mass. (51). **K**
- *Sargent, Dudley Allen, M. D., Director of the Hemenway Gymnasium, Harvard University, Cambridge, Mass. (47). 1899. **H**
- Sargent, Porter Edward, 105 Lexington Ave., Cambridge, Mass. (52). **F**
- Satterfield, David Junkin, D. D., President of Scotia Seminary, Concord, N. C. (50). **I**
- Satterlee, F. LeRoy, M. D., 8 W. 18th St., New York, N. Y. (50). **K**
- *Saunders, A. P., Ph. D., Hamilton College, Clinton, N. Y. (48). 1900. **C**
- *Saunders, Charles E., Ph. D., Central Experimental Farm, Ottawa, Canada. (41). 1895. **G**
- Saunders, Edward W., M. D., 3003 Lafayette Ave., St. Louis, Mo. (51). **K**

MEMBERS AND FELLOWS.

- Saunders, F. A., Ph. D., Instructor in Physics, Syracuse University, Syracuse, N. Y. (48). **B**
- Saunders, Dr. James, Lock Box 147, Orange, Texas. (52).
- *Saunders, William, LL.D., F. R. S. C., F. L. S., Canadian Experimental Farms, Ottawa, Canada. (17). 1874. **F**
- Saunders, Wm. H., 1407 F St., N.W., Washington, D. C. (52). **I**
- Savage, Thomas E., Professor of Geology and Nat. History, Western College, Toledo, Iowa. (52). **E F G**
- *Savage, Watson L., M. D., Director of the Gymnasium of Columbia University, Columbia Univ., New York, N. Y. (51). 1902. **K**
- *Saville, Marshall H., Amer. Mus. Nat. History, Central Park, New York, N. Y. (39). 1892. **H**
- Sawyer, Edward, Civil and Mechanical Engineer, Newton, Mass. (51). **D**
- *Sayre, Robert H., South Bethlehem, Pa. (28). 1899. **D**
- Scaife, Walter B., care A. W. Elford, Catania, Sicily. (49). **I**
- Scaife, William Lucien, 28th St., Pittsburg, Pa. (51). **B D**
- *SCHAEBERLE, J. M., 502 Second St., Ann Arbor, Mich. (34). 1886. **A**
- Schaeffer, Henri N. F., P. O. Box 676, Manchester, N. H. (46). **C**
- SCHAFER, CHAS., M. D., 1309 Arch St., Philadelphia, Pa. (29). **E F**
- SCHAFER, MRS. MARY TOWNSEND SHARPLESS, 1309 Arch St., Philadelphia, Pa. (38). **E F**
- *Schaffner, John H., Ohio State Univ., Columbus, Ohio. (48). 1899. **G**
- Scharar, Christian H., 2073 N. Main Ave., Scranton, Pa. (33). **A D E H**
- Scheffler, Frederick A., Mechanical and Electrical Engineer, Box 233, Glen Ridge, N. J. (50). **D**
- Schenck, Charles C., Ph. D., McGill University, Montreal, Canada. (51). **B**
- SCHERMERHORN, F. AUG., 101 University Place, New York, N. Y. (36).
- SCHERMERHORN, WM. C., 49 W. 23d St., New York, N. Y. (36).
- Schernikow, Ernest, P. O. Box 1191, New York, N. Y. (49).
- Schiaffino, Mariano L., Chief Electrical Engineer, "Campania de Luz de Guadalajara," Belen 2, Apartado 260, Guadalajara, Mexico. (50). **D**
- Schiedt, Richard Conrad, Professor of Biology, Franklin and Marshall College, Lancaster, Pa. (50). **F**
- Schieffelin, Eugene, 865 Madison Ave., New York, N. Y. (50).
- Schiertz, Ferdinand Alfred, Rosario Mines, Ltd., Guadalupe y Calvo, Estado de Chihuahua, Mexico. (50). **D E**
- Schiff, Jacob H., P. O. Box 1193, New York, N. Y. (49).

MEMBERS AND FELLOWS.

- Schirmer, Gustave, 117 E. 35th St., New York, N. Y. (49).
- *Schlesinger, Frank, Yerkes' Observatory, Williams Bay, Wis. (51). 1902. **A**
- Schlichting, Emil, Analytical Chemist, 61 Hicks St., Brooklyn, N. Y. (50). **C**
- *Schlotterbeck, Julius O., Ann Arbor, Mich. (46). 1899. **G**
- *Schmeckebier, Lawrence Frederick, Ph. D., U. S. Geol. Survey, Washington, D. C. (50). 1902. **E I**
- Schmid, Dr. H. Ernest, White Plains, N. Y. (25).
- Schmitt, A. Emil, M. D., 103 East 60th St., The Palermo, New York, N. Y. (50). **K**
- Schmitt, Ewald, 311 Florida Ave., N.W., Washington, D. C. (51).
- Schober, Wm. Bush, Lehigh University, South Bethlehem, Pa. (52). **C**
- Schobinger, John J., Morgan Park, Ill. (34). **B**
- *Schöney, L., M. D., 143 W. 142d St., New York, N. Y. (29). 1900. **F**
- Schoonhoven, John J., 34 Second Place, Brooklyn, N. Y. (52). **G**
- Schuchert, Charles, U. S. National Museum, Washington, D. C. (52). **E F**
- Schuette, J. H., Green Bay, Wis. (34). **B E F**
- Schultz, Carl H., 430-444 First Ave., bet. 25th and 26th Sts., New York, N. Y. (29).
- Schultz, Louis G., Coast and Geodetic Survey, Magnetic Observatory, Chiltenham, Md. (52). **B**
- *Schurman, Jacob Gould, LL.D., President Cornell University, Ithaca, N. Y. (49). 1901.
- Schuyler, Philip, Irvington-on-Hudson, N. Y. (49).
- Schwab, Dr. Sidney I., 4393 Westminster Place, St. Louis, Mo. (52). **K**
- *Schwarz, E. A., U. S. Department of Agriculture, Washington, D. C. (29). 1895. **F**
- *Schwatt, Isaac Joachim, Assistant Professor of Mathematics, University of Pennsylvania, Philadelphia, Pa. (51). 1902. **A**
- *Schweitzer, Paul, Professor of Chemistry, State Univ. of Missouri, Columbia, Mo. (24). 1877. **B C**
- Scofield, Carl S., Department of Agriculture, Washington, D. C. (52). **G**
- Scott, Prof. Arthur William, St. David's College, Lampeter, S. Wales, England. (46). **A B**
- *Scott, Charles F., Westinghouse Electric and Mfg. Co., Pittsburg, Pa. (48). 1900. **B**
- Scott, W. M., U. S. Dept. Agriculture, Washington, D. C. (50). **F**
- Scovel, Edward C., Rosebud, S. Dak. (52).

MEMBERS AND FELLOWS.

- *SCOVELL, M. A., Director and Chemist, Agricultural Experiment Station, Lexington, Ky. (35). 1887. **C**
- Scripture, Arthur M., Principal of High School, New Hartford, N. Y. (51). **D**
- *Scripture, E. W., Yale University, New Haven, Conn. (46). 1901. **H**
- *SCUDDER, SAMUEL H., Cambridge, Mass. (13). 1874. **F**
- *Scull, Miss Sarah A., Smethport, Pa. (40). 1895. **H**
- Seal, Alfred Newlin, Ph. D., Professor of Chemistry, Girard College, Philadelphia, Pa. (50). **B C**
- *Seaman, W. H., Chemist, 1424 11th St. N.W., Washington, D. C. (23). 1874. **C F**
- Searing, Anna H., M. D., Escondido, Cal. (41). **G**
- Searle, Frederick Edwards, Detroit University School, Detroit, Mich. (52). **B**
- *Searle, Prof. George M., St. Thomas College, Catholic University, Washington, D. C. (39). 1891. **A**
- Sears, Edward H., Collinsville, Conn. (50). **D I**
- Sears, Frederick Edmund, St. Paul's School, Concord, N. H. (47). **C E**
- Sears, Dr. Henry Francis, Topsfield, Mass. (50).
- *Seashore, Carl E., Univ. of Iowa, Iowa City, Iowa. (49). 1902. **H**
- Seawell, Benjamin Lee, Teacher of Biology, State Normal School, Warrensburg, Mo. (50). **F**
- Secor, William Lee, Academia, Ohio. (52). **C**
- Sedgwick, Howard M., M. D., 512 Woolner Bldg., Peoria, Illinois (52). **B C K**
- *Sedgwick, William Thompson, Massachusetts Institute of Technology, Boston, Mass. (47). 1898. **F G**
- *See, Horace, 1 Broadway, New York, N. Y. (34). 1886. **D**
- See, James W., M. E., Opera House, Hamilton, Ohio. (51). **D**
- *See, Prof. T. J. J., U. S. Naval Academy, Annapolis, Md. (48). 1901. **A**
- *Selby, Augustine Dawson, Agric. Exper. Station, Wooster, Ohio. (44). 1900. **G**
- Seligman, Isaac N., Mills Building, New York, N. Y. (49).
- Sellers, James Freeman, Prof. of Chemistry, Mercer University, Macon, Ga. (50). **C**
- Sellers, William, 1600 Hamilton St., Philadelphia, Pa. (51).
- Sercombe, Parker H., Banker, 1a Calle San Francisco, No. 8, City of Mexico, Mexico. (51). **H**
- Serrell, Gen. Edward Wellman, C. E., Forest Ave., West New Brighton, N. Y. (50). **B C D**
- Serviss, Garrett P., 8 Middagh St., Brooklyn, N. Y. (52).
- Sessinghaus, Gustavus, E. M., 1360 Columbine St., Denver, Colo. (50). **E**

MEMBERS AND FELLOWS.

- Sever, George F., Electrical Engineer, Broadway and 117th St., New York, N. Y. (49). **B**
- Seymour, George Steele, 17 Battery Place, New York, N. Y. (51). **B C**
- *Seymour, Paul Henry, 245 East 61st St., Chicago, Ill. (44). 1896. **C**
- Shafer, John A., Custodian of the Museums, N. Y. Botanical Garden, Bronx Park, New York, N. Y. (51). **G**
- Shaffner, Samuel C., Supt. Electric Lighting Co., Mobile, Ala. (50). **C D**
- Shamel, Archibald D., 1227 Princeton St., N.W., Washington, D. C. (52). **G**
- Shantz, Homer LeRoy, Colorado Springs, Colo. (50). **F**
- Sharp, Charles Cutler, C. E., E. M., President Raven Coal and Coke Co., Boomer, W. Va. (50). **D E**
- *Sharp, Dr. Clayton H., 722 Highland Ave., Newark, N. J. (45). 1897.
- Sharpe, Benjamin F., Greenwich, N. Y. (50). **B**
- Sharpe, Richard W., Wilmette, Ill. (51). **F**
- Sharples, Philip Price, A. B., 22 Concord Ave., Cambridge, Mass. (47). **C**
- *Sharples, Stephen P., 26 Broad St., Boston, Mass. (29). 1884. **C**
- *SHATTUCK, FREDERICK C., M. D., Professor Clinical Medicine, Harvard Medical College, Boston, Mass. (50). 1901. **F K**
- *Shattuck, George Burbank, Johns Hopkins University, Baltimore, Md. (47). 1899. **E**
- *Shattuck, Samuel Walker, Professor of Mathematics, University of Illinois, Champaign, Ill. (50). 1902. **A**
- Shaw, Dr. Charles Hugh, Ursinus College, Collegeville, Pa. (52). **G**
- Shaw, Edwin C., M. E., 104 Park St., Akron, Ohio. (50). **D**
- Shaw, Henry Clay, C. E., Glenshaw, Pa. (51). **D**
- Shaw, Henry Lyman, M. D., 19 Commonwealth Ave., Boston, Mass. (51). **K**
- *Shaw, Walter Robert, Ph. D., Prof. of Botany and Entomology, Agric. & Mech. College, Stillwater, Okla. Ter. (47). 1902. **F G**
- Shaw, Wilson A., Cashier, Merchants and Manuf. National Bank, Norwood Ave., cor. Forbes Ave., Pittsburgh, Pa. (50). **I**
- SHEAFER, A. W., Pottsville, Pa. (28).
- *Shear, Cornelius L., U. S. Dept. Agriculture, Washington, D. C. (49). 1901. **G**
- Shearer, John Sanford, Instructor in Physics, Cornell University, Ithaca, N. Y. (52). **B**
- Shedd, John C., Prof. of Physics, Colorado Springs, Colo. (50). **A B**
- Shedd, Solon, Professor of Geology and Mining, Agricultural College, Pullman, Wash. (50). **E**

MEMBERS AND FELLOWS.

- Sheffield, George St. John, Twin Elms Farm, Attleborough, Mass. (50).
- Sheldon, John Lewis, Plant Pathologist, W. Va. Agr. Exp. Station, Morgantown, W. Va. (50). **G**
- Sheldon, Mrs. J. M. Arms, 18 W. Cedar St., Boston, Mass. (44). **F**
- *Sheldon, Samuel, Ph. D., Polytechnic Institute, Brooklyn, N. Y. (42). 1894. **B**
- *Shelton, Edward M., 2904 Franklin Ave., Seattle, Wash. (32). 1892. **F**
- SHEPHERD, MISS ELIZABETH, 253 W. 128th St., New York, N. Y. (39).
- Shepherd, Frank I., University Station, Los Angeles, Cal. (48). **C**
- Sheppard, Morris, Lawyer and Actuary, Texarkana, Texas. (51).
- Sherman, Franklin, Jr., State Entomologist, Raleigh, N. C. (50). **F**
- Sherman, Henry Clapp, Instructor in Analytical Chemistry, Columbia University, New York, N. Y. (51). **C**
- Sherman, Lewis, M. D., 448 Jackson St., Milwaukee, Wis. (50). **F K**
- Sherwood-Dunn, B., M. D., 26 Broadway, New York, N. Y. (51). **K**
- Shidy, Leland P., Coast and Geodetic Survey Office, Washington, D. C. (52). **G**
- Shiland, Andrew, Jr., 262 W. 78th St., New York, N. Y. (50).
- Shimek, Bohumil, Professor of Botany, State University, Iowa City, Iowa. (52). **F G**
- *Shimer, Porter W., E. M., Ph. D., Easton, Pa. (38). 1889. **C**
- Shinn, Charles Howard, Head Forest Ranger, Northfork, Cal. (50). **F G**
- Shrader, John Clinton, M. D., LL.D., President Iowa State Board of Health, Iowa City, Iowa. (50). **F K**
- Shropshire, Walter, M. D., Yoakum, Texas. (50). **F K**
- Shultz, Charles S., Hoboken, N. J. (31). **F**
- Shurly, E. L., M. D., 32 Adams Ave., West Detroit, Mich. (51). **K**
- Shurtleff, Eugene, M. D., 73 Hancock St., Dorchester, Mass. (52). **K**
- Shute, D. K., M. D., 1101 13th St., N.W., Washington, D. C. (50). **F I K**
- *Shutt, Frank T., F. E. C., F. C. S., Dominion Experimental Farms, Ottawa, Canada. (47). 1898. **C**
- *Sias, Solomon, M. D., Schoharie, N. Y. (10). 1874. **K**
- Sickels, Ivin, M. D., 17 Lexington Ave., New York, N. Y. (50). **F K**
- Siemon, Rudolf, 22 East Jefferson St., Fort Wayne, Ind. (40). **A F**
- *Sigsbee, Charles D., Captain U. S. N., Navy Department, Washington, D. C. (28). 1882. **D E**
- Silloway, Perley Milton, Principal of High School, Lewiston, Montana. (51). **F**
- Silver, Elmer E., 221 Columbus Avenue, Boston, Mass. (52).

MEMBERS AND FELLOWS.

- Silvester, Richard W., President Maryland Agricultural College, College Park, Md. (50). **G**
- *Simon, Dr. Wm., 1348 Block St., Baltimore, Md. (29). 1895. **C**
- *Simonds, Prof. Frederic W., University of Texas, Austin, Texas. (25). 1888. **E F**
- Simpson, Charles Baird, Department of Agriculture, Pretoria, Transvaal, S. Africa. (52). **F G**
- Simpson, Friench, Jr., Columbus, Texas. (50). **F H K**
- Simpson, Jesse Pickrell, M.D., Palmer, Ill. (51). **K**
- Simpson, John Crayke, M. D., Govt. Hospital for the Insane, Washington, D. C. (51). **K**
- Sinclair, Alexander Grant, M. D., Memphis Hospital Medical College, Memphis, Tenn. (52). **K**
- Sinclair, Cephas Hempstone, Coast and Geodetic Survey, Washington, D. C. **A**
- Singer, George Park, 545 W. Church St., Lock Haven, Pa. (50). **B**
- Sirrine, F. Atwood, 110 New York Ave., Jamaica, N. Y. (44). **F**
- Skeel, Frank D., M. D., 58 East 25th St., New York, N. Y. (50). **F K**
- Skiff, F. J. V., Director, Field Columbian Museum, Chicago, Ill. (43).
- *Skinner, Aaron Nichols, U. S. Naval Observatory, Washington, D. C. (40). 1893. **A**
- *Skinner, Clarence A., Ph. D., University of Nebraska, Lincoln, Neb. (48). 1903. **B**
- Skinner, Clarence Edward, M. D., Physician in Charge, The Newhope Hot Air Sanitarium, 67 Grove St., New Haven, Conn. (51). **K**
- *Skinner, Henry, M. D., 716 N. 20th St., Philadelphia, Pa. (47). 1902. **F K**
- Skinner, James Dudley, 823 E. 14th Ave., Denver, Colo. (50). **B D**
- Slade, Elisha, Somerset, Mass. (29). **F**
- Slagle, Robert Lincoln, Ph. D., President, State School of Mines, Rapid City, S. D. (50). **C E**
- *Slichter, Charles S., Professor of Applied Mathematics, University of Wisconsin, Madison, Wis. (51). 1902. **A**
- *Slingerland, Mark Vernon, Assistant Professor of Economic Entomology, Cornell University, Ithaca, N. Y. (50). 1901. **F**
- Slipher, V. M., Lowell Observatory, Flagstaff, Arizona. (52). **A**
- Slocum, Chas. E., M. D., Defiance, Ohio. (34). **F G H**
- Slocum, Frederick, Ph. D., Ladd Observatory, Providence, R. I. (47).
- Slonaker, James Rollin, University of Chicago, Chicago, Ill. (49). **F**
- *Slosson, Edwin E., Professor of Chemistry, University of Wyoming, Laramie, Wyoming. (50). 1901. **C**

MEMBERS AND FELLOWS.

- *Small, John Kunkel, N. Y. Botanical Garden, Bronx Park, New York, N. Y. (44). 1902. **G**
- Smallwood, Miss Mabel Elizabeth, 430 West Adams St., Chicago, Ill. (52). **F**
- *Smallwood, Martin, Syracuse University, Syracuse, N. Y. (50). 1903. **E F**
- Smillie, Thomas W., U. S. National Museum, Washington, D. C. (40). **F**
- *Smith, Prof. Albert W., Case School of Applied Science, Cleveland, Ohio. (47). 1900. **C**
- *Smith, Alexander, Ph. D., University of Chicago, Chicago, Ill. (40). 1892. **C**
- Smith, Allen J., M. D., University of Pennsylvania, Philadelphia, Pa. (47). **H**
- Smith, Alton Lincoln, Asst. Prof., Drawing and Machine Design, Worcester Polytechnic Institute, Worcester, Mass. (52) **D**
- Smith, Mrs. Annie Morrill, 78 Orange St., Brooklyn, N. Y. (49). **G**
- Smith, Arthur, 152 Broadway, New York, N. Y. (50). **G**
- Smith, Arthur George, Assistant Professor of Mathematics, State University, Iowa City, Iowa. (50). **A**
- Smith, Arthur Whitmore, 1108 East Ann St., Ann Arbor, Mich. (44). **B**
- *Smith, Charles J., 35 Adelbert St., Cleveland, Ohio. (32). 1885. **A B**
- *Smith, Prof. Edgar F., University of Pennsylvania, Philadelphia, Pa. (33). 1891. **C**
- *Smith, Erastus G., Ph. D., Director Beloit Sanitary Laboratory, Beloit, Wis. (34). 1887. **C**
- *Smith, Ernest Ellsworth, 26 East 29th St., New York, N. Y. (43). 1898. **F K**
- *Smith, Erwin F., U. S. Dept. Agriculture, Washington, D. C. (34). 1890. **G**
- Smith, Eugene, C. E., 317 Washington St., Hoboken, N. J. (50). **D**
- *Smith, Prof. Eugene Allen, State Geologist, University, Ala. (20). 1877. **C E**
- Smith, E. R., M. D., Toledo, Iowa. (51). **K**
- Smith, Felix Ezell, Superintendent of Schools, Victoria, Texas. (51). **F G**
- *Smith, Frank, University of Illinois, Urbana, Ill. (49). 1900. **F**
- Smith, George Otis, U. S. Geological Survey, Washington, D. C. (52). **E**
- *Smith, Harlan I., Amer. Mus. Nat. History, Central Park, New York, N. Y. (41). 1896. **H**
- *Smith, Prof. Harold B., Polytechnic Institute, Worcester, Mass. (43). 1898. **D**
- Smith, Harvey F., Attorney at Law, Clarksburg, W. Va. (50). **I**

MEMBERS AND FELLOWS.

- Smith, Herbert S. S., Professor of Applied Mechanics, Princeton University, Princeton, N. J. (29). **D**
- Smith, Hugh M., Bureau of Fisheries, U. S. Dept. Commerce and Labor, Washington, D. C. (52). **F**
- Smith, Miss J. Angelina, Hopedale, Mass. (45). **E**
- Smith, J. C., 131 Carondelet St., New Orleans, La. (48).
- Smith, James Edward, Supt. of Schools, Llano, Texas. (52). **A**
- Smith, Prof. J. F., President Commercial College, Dallas, Texas. (52). **I**
- Smith, James Hervey, 217 North Central Ave., Chicago, Ill. (40).
- *Smith Jared G., Hawaiian Experiment Station, Honolulu, T. H. (47). 1901. **G**
- SMITH, MISS JENNIE M., 40 Library Place, Allegheny, Pa. (50). **A F**
- *Smith, John B., Ph. D., Rutgers College, New Brunswick, N. J. (32). 1884. **F**
- Smith, Joseph R., M. D., LL.D., Colonel and Assistant Surgeon General, U. S. A., 2300 De Lancey St., Philadelphia, Pa. (43).
- Smith, Lee H., M. D., 663 Main St., Buffalo, N. Y. (51). **H**
- SMITH, MISS MATILDA H., 40 Library Place, Allegheny, Pa. (50). **A**
- Smith, Matthew Mann, M. D., Austin, Texas. (50). **F K**
- Smith, Middleton, 1616 19th St., N.W., Washington, D. C. (52).
- Smith, Philip Sidney, 54 Concord Ave., Cambridge, Mass. (47). **E**
- *SMITH, Q. CINCINNATUS, M. D., 617 Colorado St., Austin, Texas. (26). 1881. **K**
- Smith, Thomas A., Professor of Mathematics and Physics, Beloit College, Beloit, Wis. (50). **A B**
- Smith, T. Guilford, Civil Engineer, Regent University, State of New York, Buffalo, N. Y. (50). **D**
- Smith, Warren Rufus, Instructor in Chemistry, Lewis Institute, Chicago, Ill. (52). **C**
- *Smith, William Benjamin, Professor of Mathematics, Tulane University, New Orleans, La. (50). 1901. **A**
- Smith, Wm. Lincoln, Consulting Electrical and Illuminating Engineer, Concord, Mass. (47). **D**
- Smith, William Sidney Tangier, Ph. D., U. S. Geological Survey, Washington, D. C. (50). **E**
- Smith, William T., M. D., Prof. of Physiology and Dean of Dartmouth Medical School, Hanover, N. H. (51). **K**
- *Smock, Prof. John Conover, State Geologist, Trenton, N. J. (23). 1879. **E**
- Smoot, Edgar Kenneth, Engineer and Contractor, 1511 Rhode Island Ave., N.W., Washington, D. C. (51). **D**
- Smyth, Bernard Bryan, Librarian and Secretary of the Academy of Science, Topeka, Kansas. (51). **G**

MEMBERS AND FELLOWS.

- *Smyth, C. H., Jr., Clinton, N. Y. (38). 1894. **E**
- *Sneath, E. Hershey, Professor of Philosophy, Yale University, New Haven, Conn. (51). 1902. **H**
- Snedaker, James Angus, Mining Engineer, 721-722 Equitable Bldg., Denver, Colo. (50). **D**
- Snelling, Charles Mercer, Junior Professor of Mathematics, University of Georgia, Athens, Ga. (50). **A**
- Sneve, Haldor, M. D., Lowry Arcade, St. Paul, Minn. (51). **K**
- Snook, H. Clyde, Professor of Physics and Chemistry, Allegheny College, Meadville, Pa. (50). **B C**
- Snow, Charles Carleton, 1737 9th St., N.W., Washington, D. C. (52).
- *Snow, Benjamin W., 518 Wisconsin Ave., Madison, Wis. (35). 1889. **B**
- *Snow, F. H., LL. D., Professor of Natural History, University of Kansas, Lawrence, Kan. (29). 1881. **E F**
- Snyder, Fred. D., M. D., 10 Center St., Ashtabula, Ohio. (51). **E F H**
- *Snyder, Prof. Harry, 2090 Dooley Ave., Saint Anthony Park, Minn. (44). 1897. **C**
- Snyder, Miss Lillian, Lafayette, Ind. (47). **G**
- *Snyder, Prof. Monroe B., Philadelphia Astronomical Observatory, Philadelphia, Pa. (24). 1882. **A B**
- Snyder, Nathaniel Marion, Electrical Engineer, Gering, Neb. (50). **B D**
- Snyder, William E., M. E., 510 E. North Ave., Allegheny, Pa. (51). **D**
- Snyder, Zachariah Xenophon, President State Normal School, Greeley, Colo. (50). **F**
- Sollmann, Torald, M. D., Assistant Professor of Pharmacology, Western Reserve Med. College, Cleveland, Ohio. (52). **K**
- Soper, George A., Ph. D., 29 Broadway, New York, N. Y. (46). **C**
- *Soule, R. H., 917 Seventh Ave., New York, N. Y. (33). 1886. **D**
- *Soule, William, Ph. D., Mount Union Coll., Alliance, Ohio. (33). 1899. **B C E**
- Southall, James P. C., Professor of Physics, Alabama Polytechnic Institute, Auburn, Ala. (51). **B**
- Souvielle, Mathieu, M. D., Box 355, Jacksonville, Fla. (36). **B E F**
- Souvielle, Mrs. Mathieu, Box 355, Jacksonville, Fla. (24). **A B F**
- Sowers, David Wood, Supt. Buffalo Branch N. Y. Elec. Veh. Trans. Co., 179 N. Pearl St., Buffalo, N. Y. (51). **D**
- *Spalding, Frederick P., Professor of Civil Engineering, Univ. of Missouri, Columbia, Mo. (46). 1899. **D**
- *Spalding, Volney M., Ph. D., Professor of Botany, University of Michigan, Ann Arbor, Mich. (51). 1902. **G**

MEMBERS AND FELLOWS.

- Spangler, Harry Allen, M. D., Carlisle, Pa. (51). **K**
- Spaulding, Edward G., Ph. D., College of the City of New York, New York, N. Y. (50). **I**
- Spaulding, Perley, Missouri Botanical Garden, St. Louis, Mo. (52). **G**
- Spayd, Henry Howard, Principal of Schools, Minersville, Pa. (52). **B E K**
- Spear, Gen. Ellis, 1601 Laurel Ave., Mt. Pleasant, D. C. (52). **D**
- Spencer, Arthur Coe, U. S. Geological Survey, Washington, D. C. (52). **E**
- *Spencer, Prof. J. William, 152 Bloor St., Toronto, Canada. (28) 1882. **E**
- *SPENZER, JOHN G., M. D., 116 Rose Bldg., Cleveland, Ohio. (37). 1895. **C**
- Sperry, Elmer A., Electrical Engineer, 366-388 Massachusetts Ave., Buffalo, N. Y. (51). **D**
- *Speyers, Clarence Livingston, Professor of Physical Chemistry, Rutgers College, New Brunswick, N. J. (50). 1901. **C**
- Spicer, Walter E., M. D., 312 West 51st St., New York, N. Y. (51). **K**
- Spiegelhalter, Dr. Joseph, 2166 Lafayette Ave., St. Louis, Mo. (47). **E**
- Spillman, Wm. Jasper, U. S. Dept. of Agr., Washington, D. C. (52). **G**
- *Spinney, L. B., Iowa State College, Ames, Iowa. (42). 1897. **B**
- Spofford, Paul N., P. O. Box 1667, New York, N. Y. (36).
- Spohn, Arthur Edward, M. D., Corpus Christi, Texas. (50). **F K**
- Sprague, C. C., 1900 Locust St., St. Louis, Mo. (50).
- SPRAGUE, C. H., Malden, Mass. (29).
- Sprigg, Wm. Mercer, M. D., 1015 16th St., N.W., Washington, D. C. (52). **K**
- *Springer, Dr. Alfred, 312 E. 2d St., Cincinnati, Ohio. (24). 1880. **C**
- Springsteen, Harry W., Johns Hopkins Univ., Baltimore, Md. (49). **A B**
- Squibb, Charles F., Bernardsville, N. J. (43).
- Squibb, Edward Hamilton, M. D., 148 Columbia Heights, Brooklyn, N. Y. (41). **F K**
- Stackpole, Morrill D., Genl. Supt. Overland Gold Mining Co., Sunshine, Utah. (50). **E**
- Stahley, George D., M. D., Gettysburg, Pa. (47). **F G**
- Stair, Leslie Dalrymple, 1062 E. Madison Ave., Cleveland, Ohio. (52). **G**
- Stanley, William, Great Barrington, Mass. (50).
- Stanley-Brown, Joseph, 128 Broadway, New York, N. Y. (52).
- STANTON, FRANK McMILLAN, E. M., Agent of Atlantic, Baltic and Central Mining Co.'s Atlantic Mine, Mich. (51). **D E**

MEMBERS AND FELLOWS.

- Stanton, John R., 11 and 13 William St., New York, N. Y. (49).
 Stanton, Robert Brewster, Civil and Mining Engineer, 66 Broadway, New York, N. Y. (51). **D**
- *Stanton, Timothy W., Paleontologist, U. S. Geological Survey, Washington, D. C. (50). 1902. **E**
- Starks, Edwin Chapin, Curator and Instructor, Department of Zoology, Stanford University, Cal. (50). **F**
- Starr, Elmer G., M. D., 523 Delaware Ave., Buffalo, N. Y. (50).
F K
- *Starr, Frederick, Ph. D., University of Chicago, Chicago, Ill. (36). 1892. **E H**
- *Starr, M. Allen, M. D., 5 West 54th St., New York, N. Y. (50). 1901. **K**
- Starrett, M. G., 349 W. 85th St., New York, N. Y. (49).
 Stauffer, Rev. Thomas F., 200 11th St., Sioux City, Iowa. (51). **I**
- *Stearns, Robert E. C., Ph. D., 1025 East Eighteenth St., Los Angeles, Cal. (18). 1874. **F**
- Stearns, Theron C., M. D., Consulting Chemist, 44 Montgomery St., Jersey City, N. J. (49).
 Stearns, Thomas B., Mining Engineer, Denver, Colo. (50). **D E**
- Stebbins, Miss Fannie A., 480 Union St., Springfield, Mass. (44).
F G
- Steensland, Halbert Severin, M. D., College of Medicine, Syracuse University, Syracuse, N. Y. (50). **F K**
- Steer, Justin, M. D., Medical Department, Washington University, St. Louis, Mo. (50). **F K**
- *Steiger, George, Chemical Laboratory, U. S. Geol. Survey, Washington, D. C. (40). 1901. **B C E**
- Stein, Dr. Simon G., Muscatine, Iowa. (43).
 Steinbach, Lewis W., M. D., 1309 N. Broad St., Philadelphia, Pa. (51). **K**
- Steiner, Roland, Ph. D., Grovetown, Ga. (48). **H**
- *Steinmetz, Charles Proteus, General Electric Co., Schenectady, N. Y. (40). 1895. **B**
- Steinwand, O. W., M. D., Selma, Cal. (52). **K**
- *Stejneger, Leonhard, Curator of Dept. of Reptiles, U. S. National Museum, Washington, D. C. (40). 1892. **F**
- Stellwagen, Thos. C., M. D., Prof. Physiology, Philadelphia Dental College, 1328 Chestnut St., Philadelphia, Pa. (51). **K**
- Stephens, Henry Matthew, Professor of Biology, Dickinson College, Carlisle, Pa. (50). **F G**
- *STEPHENS, W. HUDSON, Lowville, N. Y. (18). 1874. **E H**
- Stern, Philip Kossuth, Consulting Mechanical and Electrical Engineer, 130 Fulton St., New York, N. Y. (50). **B D**
- Sternberg, Charles Hazelius, Lawrence, Kansas (50). **E F**

MEMBERS AND FELLOWS:

- *Sternberg, Gen. George M., M. D., LL. D., U. S. A., War Department, Washington, D. C. (24). 1880. **F**
- Sterne, Albert E., M. D., "Norways," Indianapolis, Ind. (51). **K**
- Stetson, George R., 1441 Mass. Ave. N.W., Washington, D. C. (49). **H I**
- Steuart, Arthur, 951 Equitable Building, Baltimore, Md. (48). **C**
- Stevens, Cyrus Lee, M. D., Secy. of the Medical Society of the State of Pa., Athens, Pa. (51). **K**
- Stevens, Edward Lawrence, Associate City Superintendent of Schools, 59th St. and Park Ave., New York, N. Y. (52).
- *Stevens, Frank L., Ph. D., Prof. of Biology, College of Agric. and Mech. Arts, West Raleigh, N. C. (44). 1899. **G**
- Stevens, Frederick W., Department of Physics, Lake Forest University, Lake Forest, Ill. (50). **B**
- Stevens, George T., M. D., 22 East 46th St., New York, N. Y. (28). **B F**
- Stevens, James Franklin, M. D., 1136 O St., Lincoln, Neb. (50). **F H K**
- *Stevens, James S., The University of Maine, Orono, Me. (48). 1900. **B**
- *Stevens, Prof. W. LeConte, Washington and Lee University, Lexington, Va. (29). 1882. **B**
- Stevenson, Francis L., Electrical Engineer, Deering Division, International Harvester Co., 79 Lincoln Ave., Chicago, Ill. (47). **D**
- *Stevenson, Prof. John J., University Heights, New York, N. Y. (36). 1888. **E**
- *Stevenson, Mrs. Matilda C., Bureau of American Ethnology, Washington, D. C. (41). 1893. **H**
- Stevenson, Robert, Consulting Civil and Mining Engineer, P. O. Box 2214, San Francisco, Cal. (50). **D E**
- Stewart, Douglas, Assistant to Director Carnegie Museum, Pittsburgh, Pa. (50). **E**
- Stewart, Francis Laird, Murrysville, Pa. (51). **G**
- *Stewart, Fred. Carlton, Botanist, N. Y. Agric. Exper. Station, Geneva, N. Y. (44). 1901. **G**
- Stewart, George Walter, Professor of Physics, University of North Dakota, Grand Forks, N. Dak. (52). **B**
- Stewart, J. Clark, M. D., 1628 5th Ave., So. Minneapolis, Minn. (51). **K**
- Stewart, James Henry, Director of W. Va. Agric. Exper. Station, Morgantown, W. Va. (50). **E**
- *Stewart, Oscar M., Assist. Professor of Physics, University of Missouri, Columbia, Mo. (46). 1900. **B**
- Stewart, Ralph Chambers, 1031 Spruce St., Philadelphia, Pa. (51).

MEMBERS AND FELLOWS.

- Stewart, Robert W., M. D., The Oritz, Cincinnati, Ohio. (51). **K**
 Stickney, Gardner P., care Oliver C. Fuller & Co., Milwaukee, Wis. (44). 1901. **H**
 *Stieglitz, Dr. Julius, University of Chicago, Chicago, Ill. (39). 1895. **C**
 Stieringer, Luther, 129 Greenwich St., New York, N. Y. (50).
 *Stiles, Charles Wardell, Ph. D., Hygienic Laboratory, U. S. Public Health and Marine Hospital Service, Washington, D. C. (40). 1892. **F**
 Still, George A., 1428 Locust St., Des Moines, Iowa. (50). **C**
 Stillhamer, Arthur G., Ryerson Physical Lab., University of Chicago, Chicago, Ill. (50). **B**
 Stillman, Prof. John M., Stanford University, California. (41).
 Stillwell, Lewis Buckley, Park Row Building, New York, N. Y. (50). **B D**
 *Stine, Prof. W. M., Swarthmore College, Swarthmore, Pa. (37). 1900. **A C**
 Stingley, Miss Lela Lorena, University of Denver, University Park, Colo. (50). **A**
 Stockard, Chas R., Jefferson Military College, Washington, Miss. (52).
 Stockton, Charles G., M. D., 436 Franklin St., Buffalo, N. Y. (51). **K**
 *Stockwell, John N., 1008 Case Ave., Cleveland, Ohio. (18). 1875. **A**
 Stoddard, George Howland, M. E., 457 Marlborough St., Boston, Mass. (51). **D**
 Stoeckel, Carl, Norfolk, Conn. (52). **A E**
 Stokes, Anson Phelps, 47 Cedar St., New York, N. Y. (50). **I**
 *Stokes, Henry Newlin, Ph. D., U. S. Dept. Agriculture, Washington, D. C. (38). 1891. **C E**
 Stone, Alfred H., Greenville, Miss. (51).
 *Stone, Prof. George E., Mass. Agricultural College, Amherst, Mass. (48). 1902. **G**
 Stone, Isaac S., M. D., 1618 Rhode Island Ave., N. W., Washington, D. C. (52). **K**
 Stone, Miss Isabelle, Ph. D., Instructor in Physics, Vassar College, Poughkeepsie, N. Y. (50). **B**
 Stone, Julius F., Columbus, Ohio. (48).
 Stone, Lincoln R., M. D., Newton, Mass. (31).
 Stone, Mason A., 161 Broadway, New York, N. Y. (49).
 *Stone, Ormond, Director Leander McCormick Observatory, University of Virginia, Charlottesville, Va. (24). 1876. **A**
 Storer, Norman Wilson, care Westinghouse E. & M. Co., Pittsburgh, Pa. (50). **D**
 Storey, Thomas Andrew, Assistant Professor of Hygiene, Stanford University, Cal. (52).

MEMBERS AND FELLOWS.

- Storrs, Lucius S., Geologist, N. P. Ry. Co., St. Paul, Minn. (51). **E**
- *Story, Prof. Wm. E., Clark University, Worcester, Mass. (29).
1881. **A**
- Stose, George W., U. S. Geological Survey, Washington, D. C.
(52). **E**
- *Stowell, Prof. T. B., Potsdam, N. Y. (28). 1885. **F**
- *Stradling, George F., Ph. D., 4114 Parkside Ave., Philadelphia,
Pa. (41). 1900. **B**
- Stratton, Samuel W., National Bureau of Standards, Washington,
D. C. (52).
- Stringham, Irving, Professor of Mathematics, University of Cali-
fornia, Berkeley, Cal. (51). **A I**
- Stromsten, Frank A., Assistant Instructor of Animal Morphology,
State University of Iowa, Iowa City, Iowa. (52). **F**
- Strong, Edwin A., Department of Physical Sciences, State Nor-
mal School, Ypsilanti, Mich. (46). **B**
- Strong, Frederick F., M. D., 176 Huntington Ave., Boston, Mass.
(47). **B C K**
- Strong, Frederick G., Box 959, Hartford, Conn. (50). **D**
- *Strong, Oliver S., Columbia University, New York, N. Y. (52).
1903. **K**
- Strong, Reuben Myron, Ph. D., Haverford College, Haverford,
Pa. (51). **F**
- *Strong, Wendell M., 32 Nassau St., New York, N. Y. (44). 1899.
A B
- Stuart, William, Professor of Horticulture, University of Ver-
mont, Burlington, Vt. (52). **G**
- *Stubbs, W. C., Ph. D., Director, State Experiment Station,
Audubon Park, New Orleans, La. (40). 1901. **F**
- Stump, James A., Instructor in Physics, Agricultural College,
Fort Collins, Colo. (50). **B**
- *Sturgis, Wm. C., 28 E. Columbia St., Colorado Springs, Colo. (40).
1892. **G**
- Sullivan, J. A., 308 Main St., Malden, Mass. (27). **A**
- Summers, Henry E., Professor of Zoology, State College, Ames,
Iowa. (50). **F**
- Summers, Joseph, Principal High School, Trenton, Mo. (51). **B**
- Sumner, Francis B., Ph. D., Instructor in Natural History, Col-
lege of the City of New York, New York, N. Y. (51). **F**
- Surface, Harvey Adam, Professor of Zoology, Penna. State
College, State College, Pa. (50). **F**
- Suter, Frank, Teacher of Chemistry, 1524 31st St., N.W., Wash-
ington, D. C. (52). **C**
- Sutton, Jasper G., M. D., Rushsylvania, Ohio. (48). **F K**
- Sutton, William John, Geologist, Esquimalt and Nanaimo Ry.
Co., Victoria, B. C. (50). **E**

MEMBERS AND FELLOWS.

- Swain, Prof. Geo. Fillmore, Massachusetts Institute of Technology, Boston, Mass. (52). **D**
- Swartzel, Karl D., 6 Kirkland Ave., Cambridge, Mass. (48). **A**
- Sweat, Mrs. Margaret J. M., 103 Spring St., Portland, Maine. (52).
- Swensson, Emil, C. E., 5511 Hays St., Pittsburg, Pa. (51). **D**
- Swezey, Goodwin D., Professor of Astronomy and Meteorology, University of Nebraska, Lincoln, Neb. (50). **A**
- Swift, Henry D., West Falmouth, Mass. (52). **A**
- *Swingle, Walter T., U. S. Dept. Agriculture, Washington, D. C. (40). 1892. **G**
- Swope, Gerard, Manager of the Western Electric Co., 810 Spruce St., St. Louis, Mo. (51). **B D**
- Taber, G. Major, 508 Laughlin Bldg., Los Angeles, Cal. (51). **E**
- TAPT, ELIHU B., Burlington, Vt. (36). **H**
- Taggart, Rush, 319 West 75th St., New York, N. Y. (49).
- *Tainter, Charles Sumner, care Am. Security and Trust Co., 1405 G St. N.W., Washington, D. C. (29). 1881. **A B D**
- Tainter, Frank Stone, Civil Engineer, Far Hills, N. J. (51). **D**
- Talbot, Arthur N., Professor Structural Engineering, University of Illinois, Urbana, Ill. (51). **D**
- *Talbot, Henry P., Mass. Institute of Technology, Boston, Mass. (44). 1896. **C**
- Talbot, Miss Mignon, Teacher of Physical Geography, East High School, 167 W. Tenth Ave., Columbus, Ohio. (51). **E**
- Talbott, Mrs. Laura Osborne, 1304 13th St., N.W., Washington, D. C. (36). **F G I**
- Tallman, William Duane, Professor of Mathematics, State College, Bozeman, Mont. (50). **A**
- TALMAGE, JAMES EDWARD, Ph. D., Professor of Geology, University of Utah, Salt Lake City, Utah. (50). **E**
- Tandberg, John P., Instructor in Physics and Chemistry, St. Olaf College, Northfield, Minn. (50). **B C**
- *TANNER, PROF. JOHN HENRY, 7 Central St., Ithaca, N.Y. (47). 1899. **A B**
- Tanner, Zera Luther, Commander, U. S. Navy, The Cairo, Washington, D. C. (52).
- *Tarr, Ralph Stockman, Cornell University, Ithaca, N. Y. (49). 1901. **E**
- *Tatlock, John, Jr., Asst. Actuary, N. Y. Mutual Life Ins. Co., 32 Nassau St., New York, N. Y. (50). 1902. **A**
- Taussig, Albert E., M. D., 2647 Washington Ave., St. Louis, Mo. (51). **K**
- Taussig, James, Rialto Bldg., St. Louis, Mo. (50). **I**
- *Taylor, Alonzo Englebert, Professor of Pathology, University of California. Residence 1809 Broadway, San Francisco, Cal. (50). 1901. **C K**

MEMBERS AND FELLOWS.

- Taylor, Edward B., Pittsburg, Pa. (50). **D**
 Taylor, Edward Randolph, Penn Yan, N. Y. (39). **C**
 *Taylor, Edward Wyllys, M. D., Harvard Medical School, Boston, Mass. (50). 1902. **K**
 *Taylor, Frank B., 391 Fairfield Ave., Fort Wayne, Ind. (39). 1897.
 Taylor, Henry Ling, M. D., 125 W. 58th St., New York, N. Y. (49).
 Taylor, Henry W., Box 418, House of Representatives, Washington, D. C. (52).
 Taylor, H. Longstreet, M. D., 75 Lowry Arcade, St. Paul, Minn. (51). **K**
 Taylor, J. Erskine, M. D., Rockland, Pa. (51). **K**
 Taylor, James Landon, M. D., Wheelersburg, Ohio. (51). **K**
 *Taylor, James M., Colgate University, Hamilton, N. Y. (33). 1901. **A D**
 Taylor, Lewis H., M. D., 83 S. Franklin St., Wilkes-Barre, Pa. (51). **K**
 Taylor, Robert S., Box 2019, Fort Wayne, Ind. (39).
 Taylor, Wm. Alton, 55 Q St., N.E., Washington, D. C. (52). **G**
 Tays, Eugene Aug. Hoffman, C. E., E. M., Manager Anglo-Mexican Mining Co., San José de Gracia, Sinaloa, Mexico. (50). **D E**
 Teeters, Wilber John, State University, Iowa City, Iowa. (50). **C F K**
 Terrell, Arthur Davis, 624 E. Madison St., Iola, Kansas. (51). **C**
 *Tesla, Nikola, LL.D., 55 W. 27th St., New York, N. Y. (43). 1895. **B**
 Thaw, Benjamin, President Hecla Coke Co., Morewood Place, Pittsburg, Pa. (50). **A D**
 Thaw, Mrs. William, Box 1086, Pittsburg, Pa. (41). **H**
 *Thaxter, Roland, Ph. D., Professor of Cryptogamic Botany, Harvard University, Cambridge, Mass. (50). 1901. **G**
 Thayer, Harry Stanley, The Montana Anaconda, Mon. (50). **C**
 Thayer, Rufus Hildreth, 930 F St., N.W., Washington, D. C. (52). **I**
 *Thayer, William S., M. D., 406 Cathedral St., Baltimore, Md. (52). 1903. **K**
 Theisen, Clement F., M. D., 172 Washington Ave., Albany, N. Y. (51). **K**
 Thelberg, Elizabeth B., M. D., Resident Physician and Professor of Physiology and Hygiene, Vassar College, Poughkeepsie, N. Y. (50). **F K**
 Thiessen, Alfred Henry, 2017 I St., N.W., Washington, D. C. (51). **B**
 *Thom, Charles, 239 Hazen St., Ithaca, N. Y. (50). 1901. **G**

MEMBERS AND FELLOWS.

- *Thomas, Benjamin F., Professor of Physics, State University, Columbus, Ohio. (29). 1882. **A B**
- Thomas, George T., M. D., Rogers, Texas. (50). **F K**
- Thomas, Jerome B., Captain and Assistant Surgeon, U. S. V., care Chief Surgeon, Manila, P. I. (51). **K**
- Thomas, Lancaster, 1932 Mt. Vernon St., Philadelphia, Pa. (52). **B F**
- *Thomas, Prof. M. B., Crawfordsville, Ind. (41). 1894. **G**
- Thompson, Almon Harris, 1729 12th St., N.W., Washington, D. C. (52).
- *Thompson, Alton Howard, 721 Kansas Ave., Topeka, Kan. (33). 1902. **H**
- Thompson, Miss Anna F., P. O. Box 32, Summit, N. J. (49).
- Thompson, Benj., Chief Engineer, T. & B. V. Ry. Co., Hillsboro, Texas. (52). **D**
- Thompson, Hugh L., Consulting Mechanical Engineer, Waterbury, Conn. (51). **D**
- Thompson, James David, Library of Congress, Washington, D. C. (52). **A B**
- Thompson, James E., New Carlisle, Ohio. (48).
- Thompson, James Edwin, 3224 Broadway, Galveston, Texas. (50).
- Thompson, J. L., M. D., 22 West Ohio St., Indianapolis, Ind. (39). **F**
- *Thompson, Joseph Osgood, Amherst, Mass. (41). 1893.
- Thompson, Millett Taylor, Ph. D., Clark University, Worcester, Mass. (51). **F**
- Thompson, Robert M., 99 John St., New York, N. Y. (49).
- Thompson, Rev. Walter, D. D., Garrison-on-Hudson, N. Y. (49).
- Thompson, William, Mining, Metallurgical and Mechanical Engineer, Rossland Great Western Mines, Ltd., Rossland, B. C. (50). **D E**
- *Thompson, W. Gilman, M. D., 34 E. 31st St., New York, N. Y. (50). 1902. **F K**
- *Thomson, Elihu, Swampscott, Mass. (37). 1888. **B**
- *Thomson, Wm., M. D., 1426 Walnut St., Philadelphia, Pa. (33). 1885. **B**
- Thornber, John J., Botanist, Agr. Exper. Station, Tucson, Arizona. (50). **G**
- *Thornburg, Charles L., Lehigh Univ., S. Bethlehem, Pa. (44). 1897. **A**
- *Thorndike, E. L., Ph. D., Adjunct Prof. of Genetic Psychology, Columbia Univ., New York, N. Y. (49). 1901. **H I K**
- THORNE, MRS. PHOEBE ANNA, 558 Madison Ave., New York, N. Y. (50).
- Thorne, Samuel, Jr., 55 Liberty St., New York, N. Y. (49).

MEMBERS AND FELLOWS.

- *Thruston, Gates Phillips, Nashville, Tenn. (38). 1890. **H**
- *Thruston, R. C. Ballard, Ballard & Ballard Co., Louisville, Ky. (36). 1896. **E**
- Thurber, Charles Herbert, 29 Beacon St., Boston, Mass. (52). **I**
- Tibbals, George Attwater, 148 Milton St., Brooklyn, N. Y. (51).
- Tiernan, Austin K., C. E., P. O. Box 441, Salt Lake City, Utah. (52). **D**
- Tiffany, Lyman, 54 Kay St., Newport, R. I. (52).
- Tiffany, L. C., 27 E. 72d St., New York, N. Y. (50).
- *Tight, Professor William George, President University New Mexico, Albuquerque, N. M. (39). 1900. **E**
- Tilley, Charles Edward, Teacher of Physics and Chemistry, Hope Street High School, Providence, R. I. (50). **B C**
- Tilson, P. S., Associate Professor of Chemistry, A. and M. College, College Station, Tex. (50). **C**
- Tilton, John Littlefield, Simpson College, Indianola, Iowa. (50). **E**
- Tingle, J. Bishop, Illinois College, Jacksonville, Ill. (50). **C**
- *Titchener, E. B., Professor of Psychology, Cornell University, Ithaca, N. Y. (51). 1902. **K**
- *Tittmann, Otto H., Supt. U. S. C. and G. Survey, Washington, D. C. (24). 1888. **A**
- Titus, E., Jr., 10 E. 70th St., New York, N. Y. (50).
- Titus, E. S. G., Dept. of Agr., Washington, D. C. (50). **F**
- Todd, Albert M., Kalamazoo, Mich. (37). **C**
- *Todd, Prof. David P., Director Lawrence Observatory, Amherst College, Amherst, Mass. (27). 1881. **A B D**
- *Todd, Prof. James E., State Univ., Vermillion, S. Dak. (22). 1886. **E F**
- Todd, J. H., M. D., Christmas Knoll, Wooster, Ohio. (48).
- Todd, William J., M. D., Mt. Washington, Baltimore, Md. (51). **K**
- Tompkins, Stonewall, M. E., 1013 Franklin Ave., Houston, Tex. (51). **D**
- Tonnele, Theodore, Metallurgical Engineer, 919 College Ave., Pittsburg, Pa. (50). **E**
- Toothe, William, Madison, N. J. (49).
- Torrence, William Wilson, M. D., 649 Main St., Deadwood, S. Dak. (51). **K**
- Torey, Harry Beal, Ph. D., Instructor in Zoology, University of California, Berkeley, Cal. (52). **F**
- Totman, David M., M. D., 303 Montgomery St., Syracuse, N. Y. (50). **K**
- Tower, Olin F., Ph. D., Instructor in Chemistry, Adelbert College, Cleveland, Ohio. (50). **C**
- Tower, Ralph Winfred, Curator of Physiology, Am. Mus. Natural History, New York, N. Y. (53). **K**

MEMBERS AND FELLOWS.

- Tower, Ralph Winfred, Curator of Physiology, American Museum of Natural History, 77th St. and Central Park, West, New York, N. Y. (52). **K**
- *Towle, William Mason, Associate Professor of Practical Mechanics, Syracuse Univ., Syracuse, N. Y. (44). 1902. **D**
- Townsend, Anna B, 214 Hazen St., Ithaca, N. Y. (52). **F G**
- *Townsend, Charles O., U. S. Dept. Agriculture, Washington, D. C. (46). 1902. **G**
- Townson, Andrew J., President Board of Education, Granite Building, Rochester, N. Y. (50). **I**
- Tracy, Edward A., M. D., 353 Broadway, S. Boston, Mass. (51). **K**
- *Tracy, Samuel M., Biloxi, Miss. (27). 1881. **G**
- *Traphagen, Frank W., Ph. D., Professor of Metallurgy, Colorado School of Mines, Golden, Colo. (35). 1889. **C E F**
- Trask, Spencer, 27 Pine St., New York, N. Y. (50). **I**
- Traylor, Miss Mary Clark, 653 S. Grant Ave., Denver, Colo. (50). **A**
- Treat, Erastus B., 241-243 W. 23d St., New York, N. Y. (29). **F I**
- *Trelease, Wm., Ph. D., Director Missouri Botanical Gardens, St. Louis, Mo. (39). 1891. **G**
- Trimble, Robert E., Asst. Meteorologist and Irrigation Engineer, Agricultural College, Fort Collins, Colo. (50). **D E**
- Troth, Alonzo P., Principal of High School, Leadville, Colo. (50). **F**
- *Trowbridge, Augustus, Ph. D., Dept. Physics, University of Wisconsin, Madison, Wis. (47). 1900. **B**
- *Trowbridge, Charles Christopher, Tutor in Physics, Columbia University, New York, N. Y. (50). 1901. **B**
- True, A. C., Ph. D., Director, Office of Experiment Stations, U. S. Dept. Agriculture, Washington, D. C. (52).
- *True, Fred. W., U. S. National Museum, Washington, D. C. (28). 1882. **F**
- *True, Rodney Howard, U. S. Dept. Agriculture, Washington, D. C. (46). 1899. **G**
- Truesdell, George, Room 22, Wyatt Building, Washington, D. C. (49). **I**
- *Tucker, Richard Hawley, C. E., Astronomer, Lick Observatory, Mt. Hamilton, Cal. (50). 1902. **A D**
- Tucker, William Albert, Le Sueur, Minn. (51). **G**
- Tucker, William Conquest, Civil and Sanitary Engineer, 156 Fifth Ave., New York, N. Y. (51). **D**
- *Tucker, Willis G., M. D., Albany Medical College, Albany, N. Y. (29). 1888. **C**
- *TUCKERMAN, ALFRED, Ph. D., 342 W. 57th St., New York, N. Y. (39). 1891. **C**

MEMBERS AND FELLOWS.

- Tuckerman, Louis Bryant, Jr., 1451 Worthington St., Columbus, Ohio. (50). **A B**
- *Tufts, Frank Leo, Ph. D., Tutor in Physics, Columbia University, New York, N. Y. (50). 1901. **B**
- Tunstall, Whitmell Pugh, Engineer's Office, B. & O. Depot, Cleveland, Ohio. (52). **D**
- Tuohy, John, Tulare, California. (50). **B I**
- Turck, Fenton B., M. D., 362 Dearborn Ave., Chicago, Ill. (51). **K**
- Turnbull, Thomas, Jr., M. D., Asst. Professor of Practice of Medicine, Allegheny University, Allegheny, Pa. (50). **F K**
- Turneure, Frederic Eugene, Professor of Bridge and Sanitary Engineering, University of Wisconsin, Madison, Wis. (51). **D**
- Turner, Archelaus E., President Waynesburg College, Waynesburg, Pa. (50). **E I**
- Turner, Arthur Bertram, Ph. D., Professor of Mathematics, Temple College, Philadelphia, Pa. (52). **A**
- Turner, J. Spencer, 71 Worth St., New York, N. Y. (43). **B**
- *Tuttle, Prof. Albert H., University of Virginia, Charlottesville, Va. (17). 1874. **F**
- Tweedy, Miss Alice B., Spuyten Duyvil, New York, N. Y. (49).
- *Twitchell, E., Wyoming, Ohio. (39). 1891. **C**
- Tyler, Ansel Augustus, Ph. D., Professor of Science, Bellevue College, Bellevue, Neb. (50).
- Tyler, Prof. Harry W., 491 Boylston St., Boston, Mass. (51).
- *Tyrrell, Joseph Burr, Mining Engineer, Dawson, Y. T., Canada. (50). 1903. **D E**
- *Tyson, James, M. D., 1506 Spruce St., Philadelphia, Pa. (51). 1903. **K**
- *Uhler, Philip R., 254 W. Hoffman St., Baltimore, Md. (19). 1874. **E F**
- Uihlein, August, 332 Galena St., Milwaukee, Wis. (51).
- *Underwood, Lucien M., Columbia University, New York, N. Y. (23). 1885. **G**
- Underwood, William Lyman, Lecturer on Biology, Mass. Institute of Technology, Boston, Mass. (51). **F K**
- *Updegraff, Milton, U. S. Naval Academy, Annapolis, Md. (40). 1895. **A**
- *Upham, Warren, Secy. Minnesota Historical Society, St. Paul, Minn. (25). 1880. **E**
- Upton, George B., Milton, Mass. (50).
- *Upton, Winslow, Ladd Observatory, Providence, R. I. (29). 1883. **A**
- Vail, Miss Anna Murray, 29 Washington Square, New York, N. Y. (50).
- Vaile, Joel F., 420 Equitable Building, Denver, Colo. (50). **I**

MEMBERS AND FELLOWS

Valentine, Edw. P., Richmond, Va. (33). **H**

Valentine, Morris Crawford, Instructor in Biology, High School,
259 West 131st St., New York, N. Y. (52). **F K**

Vallé, Jules F., M. D., 3303 Washington Ave., St. Louis, Mo. (51).

K

*Van Amringe, John Howard, Professor of Mathematics, Columbia
University, New York, N. Y. (50). 1901. **A**

Van Antwerp, Rev. Francis J., 26 Harper Ave., Detroit, Mich.
(46).

VAN BEUREN, FREDERICK T., 21 W. 14th St., New York, N. Y.
(36).

Vanderbilt, Cornelius, 602 Fifth Ave., New York, N. Y. (51). **D**

Vanderlaan, J., M. D., 200 S. Terrace St., Muskegon, Mich. (51).

K

Vanderpoel, Frank, Ph. D., 153 Center St., Orange, N. J. (50).

F K

Van der Vries, John N., Ph. D., Assistant Professor of Mathe-
matics, University of Kansas, Lawrence, Kansas. (52). **A**

Van Dine, Delos Lewis, Entomologist, U. S. Experiment Station,
Honolulu, T. H. (51).

Van Duyn, John, M. D., 318 James St., Syracuse, N. Y. (50). **F K**

*Van Dyck, Prof. Francis Cuyler, Rutgers College, New Bruns-
wick, N. J. (28). 1882. **B C F**

Var Dyck, William Van Bergen, Cronly, N. C. (50). **D**

Van Gelder, Arthur P., Superintendent Climax Powder Mfg. Co.,
Emporium, Pa. (50).

*Van Hise, Charles R., Univ. of Wisconsin, Madison, Wis. (37). 1890.

E

Van Orden, Charles H., Civil Engineer, Catskill, N. Y. (51). **D**

Van Ornum, Prof. John Lane, Professor of Civil Engineering,
Washington University, St. Louis, Mo. (50). **D**

*Van Slyke, Lucius L., Agr. Exper. Station, Geneva, N. Y. (41).
1901. **C**

Van Valkenburg, Hermon L., Electrical Engineer, Amber Club,
Shady Ave., Pittsburg, Pa. (51). **D**

*Van Vleck, Prof. John M., Wesleyan University, Middletown,
Conn. (23). 1875. **A**

Van Winkle, Edgar B., 115 E. 70th St., New York, N. Y. (49).

Varney, A. L., Lt. Col., U. S. A., 143 Woodruff Place, Indianapolis.
Ind. (44). **H**

Vaughan, T. Wayland, U. S. Geological Survey, Washington,
D. C. (52). **E**

VAUX, GEORGE, JR., 404 Girard Building, Philadelphia, Pa. (33).

A E

Veatch, Arthur Clifford, U. S. Geological Survey, Washington, D. C.
(52). **E**

MEMBERS AND FELLOWS.

- Veblen, Andrew A., Professor of Physics, State University, Iowa City, Iowa. (50). **B**
- Veeder, Curtis Hussey, Mechanical Engineer, 40 Willard St., Hartford, Conn. (50). **B D**
- Velsor, Joseph A., 105 McDonough St., Brooklyn, N. Y. (50). **C**
- Venable, Prof. F. P., Chapel Hill, N. C. (39). 1891. **C**
- Venable, Wm. Mayo, C. E., E. E., care Natl. Contracting Co., 11 Broadway, New York, N. Y. (50). **D**
- *Verrill, Prof. Addison E., 86 Whalley Ave., New Haven, Conn. (47). 1891. **F**
- Vest, Solomon Alexander, Assistant Chemist, Navassa Guano Co., Wilmington, N. C. (51). **C**
- Villard, Mrs. Henry, 145 W. 58th St., New York, N. Y. (36).
- Vinal, W. Irving, 1106 East Capitol St., Washington, D. C. (40). **E**
- Vineberg, Hiram N., M. D., 751 Madison Ave., New York, N. Y. (51). **K**
- *Vining, E. P., 49 Second St., San Francisco, Cal. (32). 1887. **H**
- *Vogdes, A. W., Lt.-Col., 5th Artillery, U. S. A., San Diego, Cal. (32). 1885. **E F**
- Vogt, Frederick A., Principal of Central High School, Buffalo, N. Y. (53).
- Voje, John Henry, M. D., Private Sanatorium Waldheim, Oconomowoc, Wis. (51). **K**
- von Herrmann, C. F., Section Dir. U. S. Weather Bureau, Raleigh, N. C. (51). **B**
- von Hoffmann, Charles, M. D., 1014 Sutter St., San Francisco, Cal. (51). **K**
- von Ihering, F., Museu Paulista, Sao Paulo, Brazil. (51).
- von Mansfelde, Alexander S., M. D., "Quality Hill," Ashland, Neb. (50). **F G H K**
- *von Nardroff, Ernest R., 397 Madison St., Brooklyn, N. Y. (44). 1896. **B**
- von Ruck, Karl, M. D., Director, Winyah Sanitarium, Asheville, N. C. (51). **K**
- *von Schrenk, Hermann, Missouri Botanical Garden, St. Louis, Mo. (49). 1901. **G**
- Voris, Floyd Thomas, Professor of Physics and Chemistry, Buena Vista College, Storm Lake, Iowa. (50). **B C**
- Votey, J. William, Professor of Civil Engineering, University of Vermont, Burlington, Vt. (50). **D**
- Vreeland, Frederick K., E. E., The Sherwood, Old Point Comfort, Va. (50). **B D G**
- Waddell, Montgomery, 135 Broadway, New York, N. Y. (51). **D**
- Wade, John W., M. D., 318 N. Second St., Millville, N. J. (51). **K**
- Wadman, W. E., 102 Lord Ave., Bayonne, N. J. (50).

MEMBERS AND FELLOWS.

- WADSWORTH, F. L. O., Dir. Allegheny Observatory, Western University of Pennsylvania, Allegheny, Pa. (52). **A**
- Wadsworth, Herbert, 1801 Massachusetts Ave., N.W., Washington, D. C. (52). **H I**
- *Wadsworth, M. Edw., Professor of Mining and Geology, Penna. State Coll., State College, Pa. (23). 1874. **E**
- Wadsworth, Oliver F., 526 Beacon St., Boston, Mass. (52). **K**
- Wadsworth, William Austin, Geneseo, N. Y. (50). **G**
- *Wagner, Frank C., Rose Polytechnic Institute, Terre Haute, Ind. (34). 1897. **D**
- Wagner, George, Madison, Wis. (46). **F G**
- Wagner, Samuel, President of Wagner Free Institute of Science, Greenbank Farm, Westchester, Pa. (51).
- Waidner, Charles W., Nat. Bureau of Standards, Washington, D. C. (52). **B**
- Wainwright, Jacob T., Metallurgical Engineer, P. O. Box 774, Chicago, Ill. (51). **B D E**
- Wainwright, John William, M. D., 177 W. 83d St., New York, N. Y. (51). **K**
- Wait, Charles Edmund, Professor of Chemistry, Univ. of Tennessee, Knoxville, Tenn. (51). **C**
- Waite, Frederick Clayton, Ph. D., Asst. Prof. of Histology and Embryology, Medical Department, Western Reserve Univ., Cleveland, Ohio. (50). **F K**
- *Waite, M. B., U. S. Dept. Agriculture, Washington, D. C. (37). 1893. **G**
- *Walcott, Charles D., Director U. S. Geol. Survey, Washington, D. C. (25). 1882. **E F**
- *Waldo, Prof. Clarence A., Purdue University, Lafayette, Ind. (37). 1889. **A**
- *Waldo, Leonard, 640 West 8th St., Plainfield, N. J. (28). 1880. **A**
- Wales, Charles M., M. E., 11 Broadway, New York, N. Y. (51). **D**
- Wales, Salem H., 25 E. 55th St., New York, N. Y. (36).
- Walker, Albert Mynard, U. S. Geological Survey, Washington, D. C. (52). **E**
- Walker, Byron Edmund, Toronto, Can. (38). **E**
- Walker, Charles R., M. D., Concord, N. H. (50). **K**
- Walker, Prof. Ernest, University of Arkansas, Fayetteville, Ark. (52).
- Walker, E. W., Superintendent State School for the Deaf, Delavan, Wis. (52). **I**
- Walker, George C., Room 367, Rookery Building, Chicago, Ill. (17).
- Walker, James, 49 Maiden Lane, New York, N. Y. (43).
- Walker, John A., E. M., 260 Montgomery St., Jersey City, N. J. (50). **C D E I**

MEMBERS AND FELLOWS.

- Walker, R. M., 713 Prudential Bldg., Atlanta, Ga. (52). **D**
- Walker, T. B., Pres., Minneapolis City Library Board, 803 Hennepin Ave., Minneapolis, Minn. (51).
- Waller, Coleman Bailey, Clemson College, S. C. (51). **A B C**
- *WALLER, E., 7 Franklin Place, Morristown, N. J. (23). 1874.
- Walls, John Abbet, 1724 Notre Dame St., Montreal, Can. (51). **D**
- Walpole, Frederick A., U. S. Department of Agriculture, Washington, D. C. (52). **G**
- Walsh, James J., M. D., LL.D., Lecturer on Medicine, New York Polyclinic, 1973 Seventh Ave., New York, N. Y. (51). **K**
- WALSH, THOMAS F., Le Roy and Phelps Place, Washington, D. C. (49). **D**
- Walter, Miss Emma, 109 North 16th St., Philadelphia, Pa. (50). **E**
- Walter, Rudolph J., Mining Engineer and Metallurgist, 1452 Blake St., Denver, Colo. (50). **D E**
- Walter, W. J., 115 W. 57th St., New York, N. Y. (50).
- Walters, John Daniel, Prof. of Industrial Art, Kan. State Agricultural College, Manhattan, Kan. (51). **D**
- *Wanner, Atreus, York, Pa. (36). 1890. **H**
- Wantland, C. E., U. P. R.R. Co., 1025 17th St., Denver, Colo. (50). **E**
- Ward, Delancey W., 163 Madison Ave., Flushing, N. Y. (51). **C**
- Ward, Frank A., 16-26 College Ave., Rochester, N. Y. (40).
- *Ward, Henry A., 620 Division St., Chicago, Ill. (13). 1875. **E F H**
- *Ward, Dr. Henry B., Dean of Medical Faculty, University of Nebraska, Lincoln, Neb. (48). 1899. **F**
- Ward, Henry L., Secretary Board Trustees, Public Museum, Milwaukee, Wis. (51). **E**
- Ward, J. Langdon, 120 Broadway, New York, N. Y. (29). **I**
- *Ward, Lester F., U. S. Geol. Survey, Washington, D. C. (26). 1879. **E G**
- Ward, Louis Clinton, Teacher of Geology and Geography, Bloomington, Ind. (51). **E**
- Ward, Milan Lester, Professor of Mathematics and Astronomy, Ottawa Univ., Ottawa, Kansas. (50). **A**
- *Ward, Robert De C., Harvard Univ., Cambridge, Mass. (47). 1902. **E**
- *Ward, Dr. R. H., 53 Fourth St., Troy, N. Y. (17). 1874. **F G**
- Ward, Willard Parker, Ph. D., Mining Engineer, 164 W. 58th St., New York, N. Y. (50). **D E**
- Warden, Albert W., M. D., 325 Fulton St., Weehawken, N. J. (51). **K**
- Warder, Charles Barclay, M. D., 1715 Walnut St., Philadelphia, Pa. (51). **K**

MEMBERS AND FELLOWS.

- *Warder, Prof. Robert B., Howard University, Washington, D. C. (19). 1881. **B C**
- Wardlaw, George A., Electrical Engineer, Amber Club, Shady Ave., Pittsburg, Pa. (51). **D**
- Wardle, Harriet N., 125 N. 10th St., Philadelphia, Pa. (47). **E H**
- Ware, Miss Mary L., 41 Brimmer St., Boston, Mass. (47).
- *Ware, Wm. R., School of Architecture, Columbia University, New York, N. Y. (36). 1901. **D**
- *WARINGTON, ROBERT, F. R. S., Rothamsted, Harpenden, England. (40). 1899. **C**
- *WARNER, JAMES D., 463 E. 26th St., Flatbush, Brooklyn, N. Y. (18). 1874. **A B**
- *Warner, Worcester R., 1722 Euclid Ave., Cleveland, Ohio. (33). 1888. **A B D**
- Warren, Charles H., Ph. D., Instructor in Mineralogy, Mass. Inst. Tech., Boston, Mass. (52). **E**
- Warren, Geo. F., Jr., Howard, Neb. (52).
- Warren, Rt. Rev. Henry White, Bishop M. E. Church, University Park, Colo. (50). **A**
- *Warren, Prof. Howard C., Princeton Univ., Princeton, N. J. (46). 1901. **H K**
- *Warren, Joseph W., M. D., Bryn Mawr, Pa. (31). 1886. **F**
- *Warren, S. Edward, Newton, Mass. (17). 1875. **A I**
- Warren, William R., 68 William St., New York, N. Y. (49).
- Warrington, James N., 1711 South Hope St., Los Angeles, Cal. (34). **A B D**
- Washburn, Frederic Leonard, State Entomologist, University of Minnesota, Minneapolis, Minn. (51). **F**
- Washington, Charles Milnor, 56 E. 53d St., New York, N. Y. (52). **K**
- *Washington, Dr. Henry S., Locust, N. J. (44). 1897. **E**
- Waterhouse, James Smartt, Professor of Chemistry and Natural Science, Cumberland University, Lebanon, Tenn. (50). **C F G**
- Waters, C. E., Assistant in Chemistry, Johns Hopkins University, Baltimore, Md. (52). **C**
- Watson, Benj. Marston, Bussey Institution, Jamaica Plain, Mass. (50).
- Watson, Miss C. A., 56 Prospect St., North Andover, Mass. (31). **D**
- Watson, Frank Elbert, 832 Main St., Springfield, Mass. (51). **F**
- Watson, Irving Allison, M. D., Sec'y State Board of Health, Concord, N. H. (52). **K**
- Watson, Joseph Ralph, Rochester, Ind. (50). **G**
- Watson, Thomas A., Weymouth, Mass. (42). **E**
- *WATSON, PROF. WM., 107 Marlborough St., Boston, Mass. (12). 1884. **A**
- Watters, William, A. M., M. D., 26 S. Common St., Lynn, Mass. (40). **E G**

MEMBERS AND FELLOWS.

Watterson, Miss Ada, 153 W. 84th St., New York, N. Y. (49). **G**
 Watts, William Lawrence, 56 Henry St., Cambridge, Mass. (52).

A

Waugh, James Church, Mount Vernon, Washington. (52).
 Waychoff, Andrew J., Prof. of Geology and Physics, Waynesburg
 College, Waynesburg, Pa. (51). **B E**

*Wead, Charles K., U. S. Patent Office, Washington, D. C. (47).
 1898. **B**

Weatherly, Ulysses Grant, Professor of Economics, University
 of Indiana, Bloomington, Ind. (50). **I**

Weaver, Edwin Oscar, Professor of Physics and Biology, Witten-
 berg College, Springfield, Ohio. (51). **B F G**

Weaver, Gerrit E. Hambleton, 916 Farragut Terrace, West
 Philadelphia, Pa. (38). **G I**

Webb, Howard Scott, Professor of Electrical Engineering, Uni-
 versity of Maine, Orono, Maine. (50). **D**

*Webb, Prof. J. Burkitt, Stevens Institute, Hoboken, N. J. (31).
 1883. **A B D**

*Webber, Herbert J., U. S. Dept. Agriculture, Washington, D. C.
 (47). 1900. **G**

*Weber, Prof. Henry A., Ohio State Univ., Columbus, Ohio. (35).
 1888. **C**

Webster, Albert Lowry, C. E., Consulting Civil and Sanitary
 Engineer, 112 E. 40th St., New York, N. Y. (50). **C D**

*Webster, Prof. Arthur Gordon, Clark University, Worcester,
 Mass. (47). 1898. **A B**

Webster, Edgar H., Professor of Physical Science, Atlanta Uni-
 versity, Atlanta, Ga. (50). **B**

*Webster, Prof. F. M., 806 W. Springfield Ave., Urbana, Ill. (35).
 1890. **F**

Webster, Frederic S., Carnegie Museum, Pittsburg, Pa. (51). **E F H**

Weed, Alfred, care Nicholson File Co., Providence, R. I. (51). **D**

*Weed, Clarence M., Ph. D., Durham, N. H. (38). 1890. **F**

Weed, J. N., 244 Grand St., Newburgh, N. Y. (37). **E I**

*Weed, W. H., U. S. Geological Survey, Washington, D. C. (52).
 1903. **E**

Weeks, Edwin Ruthven, Consulting Engineer, 3408 Harrison St.,
 Kansas City, Mo. (50). **A B D I**

Weeks, John Elmer, M. D., 46 E. 57th St., New York, N. Y. (51).

K

*Weems, J. B., Ph. D., Agric. College, Ames, Iowa. (44). 1900. **C**

Weems, Mason Locke, Instructor in Physiology, Valparaiso Col-
 lege, Valparaiso, Ind. (52). **K**

Weimer, Edgar A., M. E., Supt. Weimer Machine Works Co.
 Lebanon, Pa. (51). **D**

MEMBERS AND FELLOWS.

- Weinzirl, John, Vice Director, Hadley Clim. Lab., Univ. of New Mexico, Albuquerque, New Mex. (45). **G**
- Welch, George Bramwell, 1344 G St., N.W., Washington, D. C. (52).
- *Welch, William Henry, M. D., 935 St. Paul St., Baltimore, Md. (47). 1900. **F H**
- *Weld, Laenas Gifford, Dean of Graduate College, State University of Iowa, Iowa City, Iowa, (41). 1895. **A**
- Welin, John E., Professor of Physics and Chemistry, Bethany College, Lindsborg, Kansas. (50). **B C E**
- Wells, Eliab Horatio, M. D., Professor of Natural Science, Baylor Female College, Belton, Texas. (50). **F K**
- Wells, Frank, M. D., 178 Devonshire St., Boston, Mass. (47). **C**
- Wells, Samuel, 45 Commonwealth Ave., Boston, Mass. (24). **H**
- Wells, William H., Jr., 2 Norfolk St., Strand, W. C., London, England. (39). **E**
- WELSH, FRANCIS RALSTON, 328 Chestnut St., Philadelphia, Pa. (51).
- Wendling, Hon. Geo. R., Cosmos Club, Washington, D. C. (52). **I**
- Wenner, Francis W., Supt. of Public Schools, North Baltimore, Wood Co., Ohio. (51). **B**
- Wesson, David, Southern Cotton Oil Co., Savannah, Ga. (50). **C**
- West, Max, Ph. D., care of Treasury Department, San Juan, Porto Rico. (52). **I**
- West, Thomas Dyson, M. E., Mgr., T. D. West Engrg. Co., Sharpsville, Pa. (51). **D**
- Westgate, Lewis Gardner, Ph. D., Professor of Geology, Ohio Wesleyan University, Delaware, Ohio. (51). **E**
- *WESTINGHOUSE, GEORGE, Pittsburg, Pa. (50). 1902. **D**
- Westinghouse, Henry Herman, Wilmerding, Pa. (51). **D**
- *Weston, Edward, 645 High St., Newark, N. J. (33). 1887. **B C D**
- Wetherill, Henry Emerson, M. D., 3734 Walnut St., Philadelphia, Pa. (53). **K**
- Wetzler, Joseph, 240-242 W. 23d St., New York, N. Y. (36).
- Weygant, Colonel Charles H., Newburgh, N. Y. (50). **I**
- Weyssse, Arthur W., Instructor in Zoology, Massachusetts Inst. of Technology, Boston, Mass. (52). **F**
- Wheatland, Marcus F., M. D., 84 John St., Newport, R. I. (51). **H K**
- Wheatley, Frank G., M. D., 47 Adams St., North Abington, Mass (51). **K**
- *Wheeler, Alvin Sawyer, Ph. D., Associate Professor of Chemistry, University of North Carolina, Chapel Hill, N. C. (50). 1901. **C**
- Wheeler, Chas. Fay, U. S. Department Agriculture, Washington D. C. (52). **G**

MEMBERS AND FELLOWS.

- Wheeler, C. Gilbert, 214 State St., Chicago, Ill. (51). **C**
Wheeler, E. B., Union College, Schenectady, N. Y. (52).
*Wheeler, Eben S., U. S. Engineer Office, Detroit, Mich. (50).
1901. **D**
*Wheeler, Henry Lord, Sheffield Lab., New Haven, Conn. (50).
1901. **C**
Wheeler, Horace Leslie, Watertown, Mass. (52). **A E**
Wheeler, Schuyler Skaats, Ampere, N. J. (50). **D**
Wheeler, William, C. E., Concord, Mass. (41).
*Wheeler, William Morton, American Museum of Natural History,
New York, N. Y. (50). 1901. **F**
Whelpley, Dr. H. M., 222 South Broadway, St. Louis, Mo. (52). **H**
Whelpley, James D., 1417 G St. N.W., Washington, D. C. (52). **I**
Whitaker, Milton C., Dept. of Chemistry, Columbia University,
New York, N. Y. (50).
White, Charles G., Lake Linden, Mich. (46). **B C**
White, Charles H., U. S. N., Center Sandwich, N. H. (34). **C**
*White, David, U. S. Geol. Survey, Washington, D. C. (40). 1892.
E F
*White, Horace, Editor "New York Evening Post," 18 W. 69th
St., New York, N. Y. (50). 1901. **I**
*White, H. C., Ph. D., University of Georgia, Athens, Ga. (29).
1885. **C**
*WHITE, PROF. I. C., State Geologist of West Virginia, Morgan-
town, W. Va. (25). 1882. **E**
White, John Williams, 18 Concord Ave., Cambridge, Mass. (47).
White, LeRoy S., 19 Buckingham Ave., Waterbury, Conn.
(23).
White, Mrs. Mary Bell, 1615 New Hampshire Ave., N.W., Wash-
ington, D. C. (52).
White, Oscar W., 1116 F St., N.W., Washington, D. C. (52).
White, Walter Henry, M. D., 220 Marlborough St., Boston, Mass.
(51). **K**
Whitehorne, Wm. Risby, Ph. D., Professor of Chemistry,
Mullinburg College, 462 Walnut St., Allentown, Pa. (52). **C**
*Whitfield, J. Edward, 406 Locust St., Philadelphia, Pa. (44).
1896. **C**
*Whitfield, R. P., Amer. Mus. Nat. History, Central Park, New
York, N. Y. (18). 1874. **E F H**
Whitham, Wm. Henry, Assistant in Physics, W. Va. University,
Morgantown, W. Va. (52). **B**
Whiting, S. B., 11 Ware St., Cambridge, Mass. (33). **D**
*Whiting, Miss Sarah F., Professor of Physics, Wellesley College,
Wellesley, Mass. (31). 1883. **A B**
*Whitman, Prof. Charles O., University of Chicago, Chicago, Ill.
(43). 1898. **F**

MEMBERS AND FELLOWS.

- *Whitman, Prof. Frank P., Adelbert College, Cleveland, Ohio. (33).
1885. **A B**
- *Whitney, Miss Mary W., Vassar College, Poughkeepsie, N. Y. (47).
1900. **A**
Whitney, Solon F., Public Library, Watertown, Mass. (52).
- *Whitney, Willis Rodney, Mass. Inst. Tech., Boston, Mass. (46).
1900. **C**
Whitside, Samuel M., Brig. Gen., U. S. A., 1748 P St., N.W.,
Washington, D. C.
- Whitted, Thomas Byrd, General Elec. Co., Denver, Colo. (50). **D**
- Whittemore, Williams C., 1526 N. H. Ave., Washington, D. C. (49).
- Wiechmann, F. G., M. D., 310 West 80th St., New York, N. Y.
(50). **F K**
- *Wiegand, Karl McKay, Ph. D., Cornell University, Ithaca, N. Y.
(45). 1899. **G**
Wightman, Merle J., Electrical Engineer, 302 Broadway, New
York, N. Y. (50). **D**
- Wilbour, Mrs. Charlotte B., 40 Central Park, South, New York,
N. Y. (28).
- *Wilbur, A. B., Middletown, N. Y. (23). 1874. **E**
- *Wilbur, Ray Lyman, M. D., Assistant Professor of Physiology,
Stanford University, Cal. (50). 1901. **F K**
Wilcox, Mrs. Aaron Morley, The Arlington, Washington, D. C.
(52).
- *Wilcox, Edwin Mead, Ph. D., Prof. of Biology, Ala. Poly. Inst.
Auburn, Ala. (50). 1901. **F G**
Wilcox, Miss Emily T., Middletown, Conn. (33). **A B**
- *Willcox, Miss Mary Alice, Ph. D., Professor of Zoology, Wellesley
College, Wellesley, Mass. (50). 1901. **F**
- *Willcox, Walter F., Ph. D., Professor of Economics, Cornell
University, Ithaca, N. Y. (50). 1901. **I**
WILCOX, WILLIAM W., Inventor and Manufacturer, 187 South
Main St., Middletown, Conn. (50). **D I**
- *Wilder, Burt Green, Prof. of Neurology, Cornell University,
Ithaca, N. Y. (51). 1902. **K**
Wilder, Harris Hawthorne, Ph. D., Professor of Zoology, Smith
College, Northampton, Mass. (52). **F**
- Wiley, Andrew J., C. E., Chief Engr. Boise-Payette River Electric
Power Co., Boise, Idaho. (51). **D**
- *Wiley, Harvey W., Ph. D., U. S. Dept. Agriculture, Washington,
D. C. (21). 1874. **C**
Wiley, William H., C. E., 43 E. 19th St., New York, N. Y. (50). **D E**
- Wilkins, Miss Lewanna, Eastern High School, Washington, D. C.
(52). **F G**
Wilkins, Wm. Glyde, C. E., Westinghouse Bldg., Pittsburg, Pa.
(50). **D E**

MEMBERS AND FELLOWS.

- *Wilkinson, Levi Washington, Professor of Industrial and Sugar Chemistry, Tulane University, New Orleans, La. (50). 1903. **C**
- Willard, Julius Terrass, Dir. Kans. State Exper. Sta., Manhattan, Kans. (50). **C**
- Wille, Henry Valentin, M. E., Engineer of Tests, Baldwin Locomotive Works, 2600 Girard Ave., Philadelphia, Pa. (51). **D**
- Williams, Arthur, The New York Edison Co., 55 Duane St., New York, N. Y. (50). **D**
- *Williams, Benezette, 153 La Salle St., Chicago, Ill. (33). 1887. **D**
- Williams, Charles B., North Carolina Dept. of Agric., Raleigh, N. C. (47).
- *Williams, Charles H., M. D., 1069 Boylston St., Boston, Mass. (22). 1874.
- Williams, Mrs. C. P., 284 State St., Albany, N. Y. (52).
- Williams, Charles S., 166 Montgomery St., Newburgh, N. Y. (50). **I**
- *Williams, Prof. Edw. H., Jr., Andover, Mass. (25). 1894. **D E**
- *Williams, Francis H., M. D., 505 Beacon St., Boston, Mass. (29). 1890.
- Williams, Frank H., Greene, N. Y. (50). **D**
- *Williams, Prof. Henry Shaler, Yale University, New Haven, Conn. (18). 1882. **E F**
- Williams, Ira Abraham, Assistant Professor of Geology and Mining Engineering, Iowa State College, Ames, Iowa. (52). **D E**
- Williams, J. C., 221 Orchard St., Ridgeway, Pa. (51). **E**
- Williams, Jacob Lafayette, M. D., 4 Walnut St., Boston, Mass. (51). **K**
- *Williams, Dr. J. Whitridge, Professor of Obstetrics, Johns Hopkins University, Baltimore, Md. (50). 1901. **F K**
- Williams, Leonard Worcester, Brown University, Providence, R. I. (52).
- Williams, Miss Mabel Clare, Iowa City, Iowa. (52). **H**
- Williams, Stephen Riggs, Professor of Biology, Miami University, Oxford, Ohio. (50). **F**
- Williamson, Edward Bruce, Bluffton, Ind. (50). **F**
- Williamson, G. A., 14 Dey St., New York, N. Y. (49).
- Williamson, Homer D., 133 W. 10th Ave., Columbus, Ohio. (51). **K**
- Williamson, Mrs. M. Burton, 1060 W. Jefferson St., Los Angeles, Cal. (44). **F**
- *Willis, Bailey, U. S. Geological Survey, Washington, D. C. (36). 1890. **E**
- Willis, Bernard Darwin, care Stromberg-Carlson Telephone Mfg. Co., 70-86 W. Jackson Boulevard, Chicago, Ill. (52).
- Williston, Arthur L., Director Dept. Science and Technology, Pratt Institute, Brooklyn, N. Y. (51). **D**

MEMBERS AND FELLOWS.

- *Williston, Dr. Samuel W., University of Chicago, Chicago, Ill. (51).
1902. **F K**
- *Willoughby, Charles C., Peabody Museum, Cambridge, Mass. (45).
1897. **H**
- Wills, Joseph Lainson, F. C. S., Chief of Laboratories, National
Brewers' Academy, 133 Midwood St., Brooklyn, N. Y. (50).
B C F
- WILMARTH, MRS. HENRY D., 51 Eliot St., Jamaica Plain, Mass.
(40).
- Wilmore, J. J., Director, Mechanical Department, Ala. Poly-
technic Institute, Auburn, Ala. (51). **D**
- Wilson, Alisan, The Lenox, Washington, D. C. (52). **H**
- Wilson, Prof. Andrew G., Hebron, Neb. (43). **E**
- Wilson, Charles Branch, State Normal School, Westfield, Mass.
(52). **F**
- *Wilson, E. B., Columbia University, New York, N. Y. (49).
1900.
- Wilson, Fredk. Morse, M. D., 834 Myrtle Ave., Bridgeport, Conn.
(51). **K**
- *Willson, Prof. Frederick N., Princeton, N. J. (33). 1887. **A D**
- *Wilson, Henry Van Peters, Professor of Biology, University of
North Carolina, Chapel Hill, N. C. (50). 1901. **F**
- Wilson, John C., Cosmos Club, Washington, D. C. (49). **I**
- Willson, Mortimer, M. D., Port Huron, Mich. (50). **A F**
- Wilson, Robert Lee, M. D., Assistant Surgeon, U. S. Marine Hos-
pital Service, Box 274, Honolulu, T. H. (50). **K**
- *Willson, Robert W., Cambridge, Mass. (30). 1890. **A B**
- Wilson, Mrs. Thomas, 1218 Connecticut Ave., N.W., Washington,
D. C. (52). **H**
- Wilson, William Hyatt, Prof. of Mathematics, Univ. of Wooster,
Wooster, Ohio. (50). **A**
- *Wilson, Prof. William Powell, Philadelphia Commercial Museum,
233 S. 4th St., Philadelphia, Pa. (38). 1889. **G**
- Winchell, Alexander Newton, Professor of Geology and Miner-
alogy, State School of Mines, Butte, Mont. (50). **E**
- *Winchell, Horace V., Butte, Montana. (34). 1890. **C E**
- *Winchell, Prof. N. H., Minneapolis, Minn. (19). 1874. **E H**
- Windesheim, Gustave, M. D., 255 Main St., Kenosha, Wis. (51). **K**
- Windsor, Sarah Sweet, M. D., 138 Marlborough St., Boston, Mass.
(47). **F H**
- Wingate, Miss Hannah S., 23 W. 129th St., New York, N. Y. (31).
E I
- *Winslow, Charles Edward Amory, Instructor in Biology, Mass.
Inst. Tech., Boston, Mass. (51). 1903. **F K**
- Winter, Mahlon A., 339 Penna. Ave., Washington, D. C. (52).
D E I K

MEMBERS AND FELLOWS.

- *Winterhalter, A. G., Lt. Com. U. S. N., Navy Yard, Portsmouth, N. H. (37). 1893. **A**
- *Withers, Prof. W. A., A. and M. College, Raleigh, N. C. (33). 1891. **C**
- Witherspoon, Thomas A., Patent Office, Dept. of Interior, Washington, D. C. (52). **C**
- Witmer, Lightner, Ph. D., Asst. Prof. Psychology, Univ. of Pennsylvania, Philadelphia, Pa. (46). **H**
- Witte, Max Ernest, M. D., Superintendent of Clarinda State Hospital, Clarinda, Ia. (51). **K**
- *Witthaus, Dr. R. A., Cornell Medical College, 1st Ave., and 28th St., New York, N. Y. (35). 1890.
- Wolcott, Mrs. Henrietta L. T., Dedham, Mass. (29).
- Wolf, August S., Examiners' Room, Equitable Life Assurance Society, 120 Broadway, New York, N. Y. (49).
- Wolfe, Elmer Ellsworth, Ph. D., Principal of the Academy, Marietta College, Marietta, Ohio. (51). **B C G**
- Wölfel, Paul, Chief Engineer, American Bridge Co., N.W. Cor 15th and Chestnut Sts., Philadelphia, Pa. (51). **D**
- *Wolff, Frank A., Jr., Ph. D., Asst. Physicist, N. B. S., 1429 R St. N.W., Washington, D. C. (47). 1900. **B**
- *Wolff, Dr. John E., University Museum, Cambridge, Mass. (36). 1894. **E**
- *Woll, Fritz Wilhelm, Madison, Wis. (42). 1897. **C**
- Wolverton, Byron C., Engineer, N. Y. & Pa. Telephone and Telegraph Co., P. O. Box 43, Elmira, N. Y. (50). **D**
- Wood, A. J., Professor Mechanical and Electrical Engineering, Delaware College, Newark, Del. (51). **D**
- Wood, Mrs. Cynthia A., 171 W. 47th St., New York, N. Y. (43).
- Wood, Miss Elvira, 198 Adams St., Waltham, Mass. (47).
- Wood, Matthew P., Consulting Engineer and Mechanical Expert, 234 W. 44th St., New York, N. Y. (51). **D**
- *Wood, Robert Williams, Professor of Experimental Physics, Johns Hopkins University, Baltimore, Md. (46). 1900. **B**
- Wood, Stuart, 400 Chestnut St., Philadelphia, Pa. (51).
- *Wood, Thomas D., M. D., Prof. of Physical Education, Teachers' College, Columbia University, New York, N. Y. (51). 1902. **K**
- WOOD, WALTER, 400 Chestnut St., Philadelphia, Pa. (33). **F I**
- Woodberry, Miss Rosa Louise, Teacher of Natural Science, Lucy Cobb Institute, Athens, Ga. (51). **B C**
- Woodbridge, Frederick J. E., Professor of Philosophy, Columbia University, New York, N. Y. (52).
- Woodbridge, Tyler Reed, C. E., care The Taylor and Brunton Sampling Co., Victor, Colo. (50). **D**
- *Woodbury, C. J. H., Amer. Telephone and Telegraph Co., 125 Milk St., Boston, Mass. (29). 1884. **D**

MEMBERS AND FELLOWS.

- Woodbury, Frank, M. D., 218 South 16th St., Philadelphia, Pa. (52). **K**
- Woodhull, Alfred A., M. D., Colonel, U. S. A., Retired, 46 Bayard Lane, Princeton, N. J. (51). **K**
- *Woodhull, John Francis, Teachers' College, Morningside Heights, New York, N. Y. (43). 1899.
- Woodhull, Gen. Maxwell Van Zandt, U. S. A., 2033 G St., N.W., Washington, D. C. (52).
- *Woodman, Durand, Ph. D., 127 Pearl St., New York, N. Y. (41). 1896.
- Woodruff, Lorande Loss, Assistant in Biology, Williams College, Williamstown, Mass. (52). **F**
- *Woods, Albert F., U. S. Dept. Agric., Washington, D. C. (43). 1897. **G**
- *Woods, Charles D., Professor of Agriculture, University of Maine, Orono, Maine. (50). 1901. **G**
- *Woods, Fred. A., M. D., Harvard Medical School, Boston, Mass. (51). 1902. **K**
- Woods, John A., 120 Broadway, New York, N. Y. (49).
- Woodward, Anthony, Ph. D., Amer. Mus. Nat. History, Central Park, New York, N. Y. (49).
- *Woodward, Prof. Calvin M., Washington University, St. Louis, Mo. (32). 1884. **A D I**
- *Woodward, R. S., Columbia University, New York, N. Y. (33). 1885. **A B D**
- Woodward, Samuel B., M. D., 58 Pearl St., Worcester, Mass (51). **K**
- Woodward, William Carpenter, E. E., 5 Charles Field St., Providence, R. I. (50). **C D**
- Woodworth, C. W., Asst. Professor of Entomology, University of California, Berkeley, Cal. (50). **F**
- Woodworth, George Keen, Asst. Examiner Electrical Division, U. S. Patent Office, Washington, D. C. (50). **D**
- *Woodworth, R. S., Ph. D., 338 E. 26th St., New York, N. Y. (49). 1901. **H K**
- *Woodworth, William McMichael, Ph. D., 149 Brattle St., Cambridge, Mass. (44). 1898. **F**
- Wooten, J. S., M. D., Austin, Texas. (51). **K**
- *Worcester, Dean C., U. S. Philippine Commission, Manila, P. I. (46). 1903. **F H**
- *Wright, Prof. Albert A., Oberlin College, Oberlin, Ohio. (24). 1880. **E F**
- *Wright, Prof. Arthur W., Yale University, New Haven, Conn. (14). 1874. **A B**
- *Wright, Carroll D., LL.D., Dept. of Labor, Washington, D. C. (41). 1894. **I**

MEMBERS AND FELLOWS

- Wright, Cary, Superintendent Highland Valley Power Co., Box 654, Boise City, Idaho. (51). **D**
- Wright, Rev. Clement Blake Bergin, Ph. D., 796 Astor St., Milwaukee, Wis. (50). **H**
- Wright, Fred. Eugene, Ph. D., Instructor in Petrography, Mich. Col. Mines, Houghton, Mich. (52). **E**
- *Wright, Prof. Geo. Frederick, Drawer C, Oberlin, Ohio. (29). 1882. **E H**
- *Wright, John S., Eli Lily & Co., Indianapolis, Ind. (42). 1899. **G**
- Wright, Jonathan, M. D., 73 Remsen St., Brooklyn, N. Y. (43). **K**
- Wright, Walter Livingston, Jr., Professor of Mathematics, Lincoln University, Pa. (50). **A**
- Wrinch, Frank Sidney, Ph. D., Instructor in Experimental Psychology, Univ. of California, Berkeley, Cal. (52). **H K**
- Wuensch, Alfred F., 1220 Corona St., Denver, Colo. (50). **C D E**
- WUNDERLICH, FREDERICK W., M. D., 165 Remsen St., Brooklyn, N. Y. (45).
- Würtele, John Hunter, Acton Vale, P. Q., Canada. (48).
- *Würtele, Rev. Louis C., Acton Vale, P. Q., Canada. (11). 1875. **E**
- Wurts, Alexander Jay, Manager Nernst Lamp Co., Garrison Alley and Fayette St., Pittsburg. Pa. (50). **D**
- *Wyeth, John A., M. D., 19 W. 35th St., New York, N. Y. (51). 1903. **K**
- Wylie, Robert Bradford, Univ. of Chicago, Chicago, Ill. (53). **G**
- *Wyman, Walter, M. D., Surgeon-General, Public Health and Marine Hospital Service, Washington, D. C. (51). 1903. **K**
- Yanney, Benjamin F., Prof. Mathematics and Astronomy, Mt. Union College, Alliance, Ohio. (51). **A**
- *Yarrow, Dr. H. C., 814 17th St. N.W., Washington, D. C. (23). 1874.
- Yates, J. A., Professor of Natural Science, Ottawa University, Ottawa, Kan. (50). **B C G**
- Yeates, William Smith, State Geologist, Atlanta, Ga. (50). **C E**
- Yerkes, Robert Mearns, Instructor in Comparative Psychology, Harvard University, Cambridge, Mass. (52). **K**
- York, Lewis Edwin, Supt. Public Schools, Barnesville, Ohio. (50). **I**
- Youmans, Vincent J., 175 Elm Place, Mount Vernon, N. Y. (43).
- *Young, A. V. E., Northwestern University, Evanston, Ill. (33). 1886. **B C**
- *Young, C. A., Princeton University, Princeton, N. J. (18). 1874. **A B D**
- Young, Clinton Mason, Hiram, Ohio. (51). **K**
- Young, Rev. S. Edward, 2512 Perrysville Ave., Allegheny, Pa. (51). **E**

MEMBERS AND FELLOWS.

- *Young, Stewart Woodford, Asst. Professor of Chemistry, Stanford University, Cal. (50). 1901. **C**
- Young, Walter Douglas, E. E., B. & O. R.R. Co., 309 Oakdale Road, Roland Park, Baltimore, Md. (51). **D**
- *Zalinski, E. L., U. S. A., Century Club, 7 W. 43d St., New York, N. Y. (36). 1891. **D**
- Zeigler, J. L., M. D., Mount Joy, Pa. (52). **C G K**
- *Zeleny, John, Associate Professor of Physics, University of Minnesota, Minneapolis, Minn. (50). 1901. **B**
- *Ziwet, Alexander, 644 S. Ingalls St., Ann Arbor, Mich. (38). 1890. **A**
- Zuber, Wm. H., 26 College Avenue, Greenville, Pa. (52). **B C**

INCORPORATED SCIENTIFIC BODIES.

INCORPORATED SCIENTIFIC BODIES.

[Holding membership under the provisions of Article 3 of the Constitution.]

California, The University of, Library, Berkeley, Cal. (52).

Cincinnati, Public Library of, Cincinnati, Ohio. (53).

Manchester Institute of Arts and Sciences, Manchester, N. H. (48).

Marietta College Library, Marietta, Ohio. (51).

Mt. Carmel Scientific Society, Mt. Carmel, Ill. (50).

Nebraska, The University of, Library, Lincoln, Neb. (51).

Philadelphia, The Free Library of, 1217-1221 Chestnut St., Philadelphia, Pa. (51).

P. M. Musser Public Library, Muscatine, Iowa. (51).

Pratt Institute Free Library, Ryerson St., Brooklyn, N. Y. (52).

St. Olaf Library, Northfield, Minn. (52).

Wilmington Institute Free Library, Wilmington, Del. (52).

SUMMARY:

(December 1, 1903.)

Surviving Founders, 3; Patrons, 2; Honorary Fellows, 3; Fellows, 1195; Members, 2812; Total, 4007.

NOTE.—The omission of an address in the foregoing list indicates that letters mailed to that last printed were returned as uncalled for. Information of the present address of the members so indicated is requested by the PERMANENT SECRETARY.

GEOGRAPHICAL DISTRIBUTION.

[Corrected to December 1, 1903.]

ALABAMA.

AUBURN.

Dunstan, A. St. C., Polytechnic Institute.
Miller, Emerson R., Polytechnic Institute.
Ross, Bennett Battle, Polytechnic Institute.
Southall, James P. C., Polytechnic Institute.
Wilcox, Edwin M., Polytechnic Institute.
Wilmore, J. J., Polytechnic Institute.

BIRMINGHAM.

Brown, George S., 2220 First Avenue.

GREENSBORO.

Carson, Shelby Chadwick.

MOBILE.

Shaffner, Samuel C., care Electric Lighting Company.

SELMA.

DuBose, F. G., 915 Alabama Street.
Kirkpatrick, Samuel.

UNIVERSITY.

Buchner, Edward F.
McCalley, Henry.
Smith, Eugene Allen.

ARIZONA.

FLAGSTAFF.

Slipher, V. M., Lowell Observatory.

GLOBE.

Collins, T. Shields.

PRESCOTT.

Blauvelt, Harrington.

TUCSON.

Cannon, W. A.
Forbes, Robert H.
Thornber, John J., Agric. Exper. Station.

ARKANSAS.

CONWAY.

Hendrix College Library.

GEOGRAPHICAL DISTRIBUTION—CAL.

FAYETTEVILLE.

Johnson, W. Smythe, University of Arkansas.
Muckenfuss, A. M., University of Arkansas.
Pickel, Frank Welborn, University of Arkansas.
Purdue, Albert Homer, University of Arkansas.
Rose, Lewis H., University of Arkansas.
Walker, Ernest, University of Arkansas.

FORT SMITH.

Molitor, Frederic A.

CALIFORNIA.

BERKELEY.

Blake, Edwin Mortimer, 1910 Addison Street.
Blasdale, Walter Charles, University of California.
Bancroft, Frank Watts, University of California.
Booth, Edward, University of California.
Hilgard, E. W., University of California.
Jaffa, Meyer Edward.
Kofoid, Charles Atwood, University of California.
Kroeber, A. L., University of California.
Lawson, Andrew C., University of California.
Loughridge, R. H., University of California.
Merriam, John C., University of California.
Moore, Ernest Carroll, University of California.
Morgan, Wm. Conger, University of California.
Ritter, William Emerson, University of California.
Stingham, Irving, University of California.
Torrey, Harry Beal, University of California.
Woodworth, C. W., University of California.
Wrinch, Frank Sidney, University of California.

CLAREMONT.

Brackett, Frank P., Pomona College.

ECHO MOUNTAIN.

Larkin, Edgar L., Lowe Observatory.

ESCONDIDO.

Searing, Anna H.

FAIR OAKS.

Cranston, Robert E.

GAVIOTA.

Hollister, John James.

GEOGRAPHICAL DISTRIBUTION—CAL.

HIGHLAND.

Browning, Charles C.

KELSEYVILLE.

Chisholm, A. Arthur.

KENNET.

Brown, Austin H., Jr.

LOS ANGELES.

Baumgardt, B. R., 626 W. 30th St.

Comstock, Theo. B., 534 Stinson Building.

Dozier, Melville, State Normal School.

Ellis, H. Bert, 243-246 Bradbury Block.

Hooker, John D., 130 S. Los Angeles Street.

Hoose, James H., University of Southern California.

Knight, Wm. H., 2 Bryson Block.

Powell, Thomas, 215-217 Laughlin Building.

Shepherd, Frank I., University Station.

Stearns, Robert E. C., 1025 East 18th Street.

Taber, G. M., 508 Laughlin Building.

Warrington, James N., 1711 South Hope Street.

Williamson, Mrs. M. Burton, 1060 West Jefferson Street.

MARTINEZ.

Muir, John.

MT. HAMILTON.

Campbell, William Wallace, Lick Observatory

Perrine, C. D., Lick Observatory.

Tucker, Richard Hawley, Lick Observatory.

MOUNTAIN VIEW.

Ehrhorn, Edw. M:

NORTHFORK.

Shinn, Charles Howard

OAKLAND.

LeConte, Louis Julian, P. O. Box 482.

OROVILLE.

Kimball, Edwin Boyce.

PALO ALTO.

Nott, Charles Palmer, P. O. Box 281.

PASADENA.

Arnold, Delos.

Bridge, Norman, 100 Grand Avenue.

Claypole, Miss Agnes M.

Claypole, Miss Edith J.

Fényes, Adalbert, P. O. Box 20.

GEOGRAPHICAL DISTRIBUTION—CAL.

Johnson, John Benjamin, 708 East Colorado Street.
McBride, Jas. H.
Mattison, Fitch C. E., Stowell Building.

PETALUMA.

Carey, Everett P.

SACRAMENTO.

Briggs, Wallace A., 212½ J Street.
Lichthardt, G., Jr., 18th and M Streets.

SAN DIEGO.

Carpenter, Ford A., United States Weather Bureau.
Vogdes, A. W.

SAN FRANCISCO.

Anderson, Winslow, 1025 Sutter Street.
Barkan, Adolph, Mutual Savings Bank Building.
Bishop, James Hall, 2309 Washington Street.
Bishop, Mrs. Josephine Hall, 2309 Washington Street.
Blum, Sanford, 1243 Franklin Street.
Brown, Philip K., 1303 Van Ness Avenue.
Davidson, George, 2221 Washington Street.
Eastwood, Miss Alice, Academy of Sciences.
Herzstein, M., 801 Sutter Street.
Hirschfelder, Jos. Oakland, 1392 Geary Street.
Hood, William, 512 Van Ness Avenue.
Jones, Philip Mills, 1710 A Stockton Street.
Kelley, Walter S., 1393 Golden Gate Avenue.
Lachman, Arthur, 1909 Eddy Street.
Lee, Francis Valentine T., 69-75 New Montgomery Street.
Lengfeld, Felix, 202 Stockton Street.
Manson, Marsden, 2010 Gough Street.
Molera, E. J., 606 Clay Street.
Moody, Robert O., Hearst Anatomical Laboratory.
Moser, Jefferson F., Station D.
Stevenson, Robert, P. O. Box 2214.
Taylor, Alonzo Englebert, 1809 Broadway.
Vining, E. P., 49 Second Street.
von Hoffmann, Charles, 1014 Sutter Street.

SANTA ANA.

Pierce, Newton B.

SANTA BARBARA.

Oothout, William.

SANTA ROSA.

Burbank, Luther.

GEOGRAPHICAL DISTRIBUTION—COLO.

SELMA.

Steinwand, O. W.

STANFORD UNIVERSITY.

Branner, John C.
Campbell, Douglas H.
Carlson, Anton Julius.
Dudley, William R.
Folsom, David M.
Gilman, Charles E.
Jenkins, Oliver Peebles.
Jordan, David Starr.
Kellogg, Vernon Lyman.
Miller, George A.
Mitchell, John P.
Newsom, John F.
Peirce, George James.
Sanford, Fernando.
Starks, Edwin Chapin.
Storey, Thomas Andrew.
Stillman, John M.
Wilbur, Ray Lyman.
Young, Stewart Woodford.

TULANE.

Tuohy, John.

COLORADO.

ALCOTT.

Hallack, H. Tuthill.

ANACONDA.

Thayer, Harry Stanley, The Montana.

BOULDER.

Annear, John Brothers, 1028 Regent Street.
Armstrong, Robert.
Baker, James H., University of Colorado.
Blake, Fred. C.
Duane, William, University of Colorado.
Fenneman, Nevin M., University of Colorado.
George, Russell D., University of Colorado.
Henderson, Junius.
Patton, Arthur L., State Preparatory School.
Ramaley, Francis, University of Colorado.

COLORADO SPRINGS.

Anderson, James Thomas, 1112 N. Cascade Ave.
Cajori, Florian, Colorado College.

GEOGRAPHICAL DISTRIBUTION—COLO.

Cockerell, T. D. A., Coburn Library.
Cragin, Francis Whittemore, 1715 Wood Avenue.
Evans-Carrington, Edward, 227 E. Cucharras Street.
Gardiner, Charles Fox, 818 N. Cascade Avenue.
Hawkins, J. Dawson.
Hayes, Joel Addison.
Hoagland, Henry Williamson, 327 N. Nevada Avenue.
Loud, Frank H.
McAllister, Henry, Jr., 512 Mining Exchange Building.
Pastorius, Charles Sharpless, P. O. Box 428.
Shantz, Homer L.
Shedd, John C.
Sturgis, Wm. C., 28 E. Columbia Street.

CRIPPLE CREEK.

Moore, Charles James, P. O. Box 548.

DENVER.

Alexander, George E., 1736 Champa Street.
Bell, George, 200 S. Washington Avenue.
Bolles, Newton A., 1457-59 Ogden Street.
Brunton, David W., 865 Grant Avenue.
Bullene, Mrs. Emma F. Jay, 1431 Court Place.
Came, Virgil M., 315 Quincy Building.
Cannon, George Lyman, High School No. 1.
Carnahan, Charles T., Equitable Building.
Carpenter, Franklin R., 1420 Josephine Street.
Chase, John, 414-415 Kittredge Building.
Clerc, Frank L., Hotel Metropole.
Comstock, Charles Worthington, 76 Grant Avenue.
Elder, E. Waite, High School No. 1.
Ferril, William C., 2123 Downing Avenue.
Garvin, John B., High School No. 1.
Gauss, Robert, care *Denver Republican*.
Hammond, John Hays.
Hays, Charles I., care North Side High School.
Hensel, Samuel T., 801 East Colfax Avenue.
Holmes, A. M., Jackson Block.
Keim, Edward Tudor, 1421 Champa Street.
Kepner, Harry V., Manual Training High School.
Kinney, Julius Eugene, 1427 Stout Street.
Lender, Mrs. Julia A., 2201 Lincoln Avenue.
Leonard, Percy A., P. O. Box 364.
Ling, Charles Joseph, Manual Training High School.
Mahin, John W., 1411 16th Street.
Miles, Mrs. Cornelia, 1544 Franklin Street.

GEOGRAPHICAL DISTRIBUTION—COLO.

Peabody, Mrs. Lucy E., 1430 Corona Street.
Peck, W. A., 1643 Champa Street.
Sessinghaus, Gustavus, 1360 Columbine Street.
Skinner, James Dudley, 823 East 14th Avenue.
Snedaker, James A., 721-722 Equitable Building.
Stearns, Thomas B.
Traylor, Miss Mary C., 653 South Grant Avenue.
Vaile, Joel F., 420 Equitable Building.
Walter, Rudolph J., 1452 Blake Street.
Wantland, C. E., 1025 17th Street.
Whitted, Thomas B., General Electric Company.
Wuensch, Alfred F., 1220 Corona Street.

FORT COLLINS.

Ammons, Miss Theodosia G., Agricultural College.
Aylesworth, Barton O., Agricultural College.
Carpenter, Louis G., Agricultural College.
Danielson, A. H., Agricultural College.
Davis, Charles F.
Gillette, C. P., Agricultural College.
Griffith, C. J., Agricultural College.
Lawrence, James W., Agricultural College.
Paddock, Wendell, Agricultural College.
Stump, James A., Agricultural College.
Trimble, Robert E., Agricultural College.

GOLDEN.

Alderson, Victor C., Colorado School of Mines.
Palmer, Charles Skeele, Colorado School of Mines.
Patton, Horace B., Colorado School of Mines.
Traphagen, Frank W., Colorado School of Mines.

GREELEY.

Abbott, Frank L., State Normal School.
Beardsley, Arthur E., State Normal School.
Snyder, Zachariah X., State Normal School.

LEADVILLE.

Troth, Alonzo P.

MAGNOLIA.

Blakeslee, Olin S.

PUEBLO.

Holbrook, Henry R.
Palmer, Irving A., Eiler's Plant, A. S. & R. Co.

TELLURIDE.

Lay, Henry Champlin.

TRINIDAD.

Parker, Charles V.

UNIVERSITY PARK.

Engle, Wilber D., University of Denver.

Howe, Herbert Alonzo, University of Denver.

Russell, Herbert Edwin, University of Denver.

Stingley, Miss Lela L., University of Denver.

Warren, Henry W.

VICTOR.

Finch, John Wellington.

Woodbridge, Tyler Reed, The Taylor and Brunton Sampling Co.

CONNECTICUT.

ANSONIA.

Brittin, Lewis H.

Grower, Geo. G.

BRIDGEPORT.

Godfrey, Charles C., 753 Lafayette Street.

Lovett, Miss Mary, 293 Golden Hill.

Pratt, Alexander, Jr., 26 Brunnell Street.

Wilson, Frederick Morse, 834 Myrtle Avenue.

COLLINSVILLE.

Sears, Edward H.

CROMWELL.

Hallock, Frank Kirkwood.

DARIEN.

Brett, George P.

DERBY.

Brewster, Frank H., P. O. Box 418.

HARTFORD.

Allen, J. M.

Beach, Charles Coffing, 54 Woodland Street.

Bond, George M., 141 Washington Street.

Edwards, Charles Lincoln, Trinity College.

Genthe, Karl W., Trinity College.

Goodwin, James, 76 Garden Street.

Greene, Jacob L., Office Mutual Life Insurance Company.

Howard, Charles P., 116 Farmington Avenue.

Hyde, Clement C., 41 Willard Street.

Pease, Miss Clara A., Public High School.

Perkins, Arthur, 14 State Street.

Riggs, Robert Baird, Trinity College.
 St. John, Howell W., P. O. Box 913.
 Strong, Frederick G., Box 959.
 Veeder, Curtis Hussey, 40 Willard Street.

LAKEVILLE.

Bissell, Leslie Dayton, Hotchkiss School.

LITCHFIELD.

Peck, Frederic W.

MERIDEN.

Hitchcock, Caroline Judson, High School.
 Pettie, J. T.

MIDDLETOWN.

Atwater, W. O., Wesleyan University.
 Bradley, Walter Parke, Wesleyan University.
 Cady, Walter G., Wesleyan University.
 Crawford, Morris B.
 Hart, Samuel, Berkeley Divinity School.
 Rice, W. North, Wesleyan University.
 Van Vleck, John M., Wesleyan University.
 Wilcox, Miss Emily T.
 Wilcox, William W., 187 South Main Street.

NEW HAVEN.

Anderson, William G., Yale Gymnasium.
 Arnold, Ernst Hermann, 46 York Square.
 Baker, Hugh P., Yale Forest School.
 Baldwin, Simeon E.
 Bauder, Arthur Russell, Boardman High School.
 Bishop, L. B., 356 Orange Street.
 Brewer, William H., 418 Orange Street.
 Brown, Mrs. Caroline R., Observatory Place.
 Brown, Robert, Yale University Observatory.
 Browning, Philip Embury, Yale University.
 Brush, George J., Yale University.
 Chase, Frederick L., Yale University Observatory.
 Chittenden, Russell H., Yale University.
 Churchill, William, Yale University.
 Dana, Edward Salisbury.
 Du Bois, Aug. J.
 Dudley, S. W., 333 York Street.
 Duncan, George M., Yale University.
 Elkin, William L., Yale University Observatory.
 Evans, Alexander W., 12 High Street.
 Fisher, Irving, 460 Prospect Street.

Gooch, Frank A., Yale University.
 Granville, William Anthony, Yale University.
 Gregory, Herbert E., Yale University.
 Harrison, Judge Lynde, 52 Hillhouse Avenue.
 Hastings, C. S., Yale University.
 Hotchkiss, Henry Stuart, 55 Hillhouse Avenue.
 Hurst, Julius H., 269 Canner Street.
 Jenkins, Edward H., Agricultural Station.
 Judd, Charles H., Yale University.
 Kindle, Edward M., 109 Elm Street.
 Lang, Henry R., Yale University.
 Lockwood, Edwin H., Yale University.
 MacCurdy, George Grant, 237 Church Street.
 Marble, Milton M., Hillhouse High School.
 McAllister, Cloyd N., Yale University.
 Moody, Mrs. Mary B., Fair Haven Heights.
 Penfield, S. L., Yale University.
 Phillips, Andrew W., 209 York Street.
 Richards, Charles B., 237 Edwards Street.
 Scripture, E. W., Yale University.
 Skinner, Clarence Edward, 67 Grove Street.
 Sneath, E. Hershey, Yale University.
 Verrill, Addison E., 86 Whalley Avenue.
 Wheeler, Henry Lord, Yale University.
 Williams, Henry Shaler, Yale University.
 Wright, Arthur W., Yale University.

NORFOLK.

Stoeckel, Carl.

PORTLAND.

Sage, John H.

SOUTH NORFOLK.

Hall, Asaph.

SOUTH NORWALK.

Hill, Ebenezer, Norwalk Iron Works.

STAMFORD.

Emery, Albert H.
 Emery, Albert Hamilton, Jr., 312 Main Street.

WATERBURY.

Rodman, Charles S.
 Thompson, Hugh L.
 White, LeRoy S., 19 Buckingham Avenue.

GEOGRAPHICAL DISTRIBUTION—DEL.—D. C.

WEST CORNWALL.

Gold, Theodore S.

WEST HAVEN.

Nason, Frank L.

WESTPORT.

Ruland, Frederick D.

WILLIMANTIC.

Fox, Charles James, Lock Box A.

WINDSOR.

Heath, Harry E., The Eddy Electric Mfg. Co.

DELAWARE.

MONTCHANIN.

Du Pont, Francis G.

NEWARK.

Brown, Harold W., Delaware College.

Brown, Newton H.

Wood, A. J., Delaware College.

WILMINGTON.

Brown, Glenn V., 1302 Jefferson Street.

Canby, William M., 1101 Delaware Avenue.

Leisen, Theodore Alfred.

Pusey, Charles W., The Pusey & Jones Co.

Reese, Charles L., 1020 Jackson Street.

DISTRICT OF COLUMBIA.

WASHINGTON.

Abbe, Cleveland, Weather Bureau.

Abbe, Cleveland, Jr., 2017 I Street, N.W.

Abbe, Truman, 2017 I Street, N.W.

Abbott, Charles G., Smithsonian Institution.

Ailes, Milton E., Riggs National Bank.

Allen, Edwin W., Department of Agriculture.

Allen, F. I., Patent Office.

Allderdice, William H., Navy Department.

Allen, H. Jerome, 421 H Street, N.E.

Alsop, E. B., 1502 20th Street N.W.

Alvord, Henry E., Department of Agriculture.

Arnold, Ralph, Geological Survey.

Ashmead, William H., National Museum.

Austin, Oscar P., Bureau of Statistics.

- Ayres, Horace B., Geological Survey.
 Bailey, Frank H., Navy Department.
 Bailey, Vernon, Department of Agriculture.
 Baker, Frank, 1728 Columbia Road.
 Baker, Marcus, Geological Survey.
 Balch, Alfred William, Navy Department.
 Baldwin, Wm. D., 25 Grant Place.
 Ball, Carleton R., Department of Agriculture.
 Barnum, Miss Charlotte C., Coast and Geodetic Survey.
 Bartsch, Paul, National Museum.
 Bates, Henry H., The Portland.
 Bauer, Louis A., Coast and Geodetic Survey.
 Beal, Walter H., Department of Agriculture.
 Beaman, George Herbert, 2232 Massachusetts Avenue, N.W.
 Bebb, Edward C., Geological Survey.
 Becker, George F., Geological Survey.
 Bell, Alex. Graham, 1331 Connecticut Avenue, N.W.
 Bell, Alexander Melville, 1525 35th Street.
 Benjamin, Marcus, National Museum.
 Benton, John R., 132 A Street N.E.
 Bermann, I., The Plaza.
 Bessey, Ernst A., Department of Agriculture.
 Bigelow, Frank H., Weather Bureau.
 Blount, Henry Fitch, "The Oaks."
 Bolce, Harold, The Franconia.
 Boutwell, John Mason, Geological Survey.
 Bradford, Royal B., Navy Department.
 Briggs, Lyman J., Department of Agriculture.
 Bright, Richard R., Navy Department.
 Brodhead, Mark, 1733 19th Street, N.W.
 Brooks, Alfred Hulse, Geological Survey.
 Brown, Clement, 1440 M Street, N.W.
 Brown, Edgar, Department of Agriculture.
 Brown, Ellis W., 924 24th Street, N.W.
 Browne, Aldis B., 1419 F Street, N.W.
 Bryan, Joseph H., 818 17th Street, N.W.
 Cameron, F. K., Department of Agriculture.
 Campbell, Marius, Geological Survey.
 Carr, William Kearney, 1413 K Street, N.W.
 Carr, William Phillips, 1418 L Street, N.W.
 Carroll, James, 2147 F Street, W.N.
 Carleton, M. A., Departmen, of Agriculture.
 Chamberlain, Frederic M., Fish Commision.
 Chapman, Robert Hollister, Geological Survey.
 Chester, Colby M., Naval Observatory.

- Chickering, J. W., "The Portner."
 Chittenden, Frank Hurlbut, Department of Agriculture.
 Clapp, Frederick G., Geological Survey.
 Clark, James Albert, "The Cumberland."
 Clarke, F. W., Geological Survey.
 Claudy, C. H., 1302 F Street.
 Clifton, Richard S., Department of Agriculture.
 Collier, Arthur James, Geological Survey.
 Collins, Guy N., 2818 13th Street, N.W.
 Cook, Orator F., Department of Agriculture.
 Coquillett, D. W., National Museum.
 Corbett, L. C., Department of Agriculture.
 Coville, Frederick V., Department of Agriculture.
 Crampton, Charles A., Treasury Department.
 Crandall, Francis A., 2219 15th Street, N.W.
 Crosby, Oscar Terry, Cosmos Club.
 Crowell, John Franklin, Bureau of Statistics.
 Crozier, Wm., Ordnance Office, War Department.
 Curtis, William E., Post Building.
 Cushman, Allerton, Bureau of Chemistry, Department of Agriculture.
 Dall, William H., Smithsonian Institution.
 Darton, Nelson Healey, Geological Survey.
 Daugherty, Jerome, Georgetown University.
 Davis, C. H., Navy Department.
 Davison, Gregory C., Navy Department.
 Dean, Edward B., Hotel Gordon.
 de Schweinitz, E. A., Department of Agriculture.
 Dewey, Lyster H., Department of Agriculture.
 Diller, J. S., U. S. Geological Survey.
 Dodge, Charles Richards, 1336 Vermont Avenue, N.W.
 Dow, Allan W., District Building.
 Droop, Edward F., 1455 Bacon Street.
 Duvel, Joseph W. T., 2818 13th Street, N.W.
 Dyar, Harrison G., National Museum.
 Eckel, Edwin C., U. S. Geological Survey.
 Edwards, Clarence R., War Department.
 Eichelberger, William Snyder, Naval Observatory.
 Eimbeck, William, Coast and Geodetic Survey.
 Ely, Charles R., 5 Kendall Green.
 Emmons, S. F., Geological Survey.
 Emory, Frederick, State Department.
 Evans, Henry B., 3009 Cambridge Place.
 Evans, Walter H., Department of Agriculture.
 Evermann, Barton W., Bureau of Fisheries.

GEOGRAPHICAL DISTRIBUTION—D. C.

Fairchild, David Grandison, Department of Agriculture.
 Fargis, Geo. A., Georgetown University.
 Farquhar, Henry, Census Office.
 Fewkes, J. Walter, Bureau of American Ethnology.
 Fireman, Peter, Cosmos Club.
 Fischer, Louis Albert, U. S. C. and G. Survey.
 Fisher, Robert Jones, 614 F Street, N.W.
 Fleming, John A., U. S. C. and G. Survey.
 Fletcher, Robert, Army Medical Museum.
 Flint, James M., "The Shoreham."
 Forwood, William H., 1425 Euclid Place, N.W.
 Fowler, Edwin H., Coast and Geodetic Survey.
 Frederick, Charles Warnock, Naval Observatory.
 French, Owen B., Coast and Geodetic Survey.
 Frisby, Edgar, Naval Observatory.
 Fuller, Melville W., 1801 F Street N.W.
 Fuller, Myron L., Geological Survey.
 Gaff, Thomas T., 1738 M Street.
 Galloway, B. T., Department of Agriculture.
 Garriott, Edward B., Weather Bureau.
 Gilbert, G. K., Geological Survey.
 Gill, Theodore N., Cosmos Club.
 Girty, George H., Geological Survey.
 Glover, Charles C., 1703 K Street, N.W.
 Gould, H. P., 1219 13th Street, N.W.
 Graham, Andrew B., 1230 Pennsylvania Avenue.
 Green, Bernard Richardson, 1738 N Street, N.W.
 Griffiths, David, Department of Agriculture.
 Grosvenor, Gilbert H., Corcoran Building.
 Guthe, Karl E., National Bureau of Standards.
 Hague, Arnold, Geological Survey.
 Hamilton, William, Bureau of Education.
 Harbaugh, Miss Joanna, 1100 M Street.
 Harris, Rollin Arthur, Coast and Geodetic Survey.
 Hartley, Charles P., Department of Agriculture.
 Harvie, Miss Lelia J., Coast and Geodetic Survey.
 Haupt, Herman, "The Concord."
 Hay, William P., Howard University.
 Hayes, C. Willard, Geological Survey.
 Hayford, John F., Coast and Geodetic Survey.
 Hazard, Daniel L., Coast and Geodetic Survey.
 Heaton, Augustus G., 1618 17th Street, N.W.
 Hedrick, Henry B., Naval Observatory.
 Henry, Alfred J., Weather Bureau.
 Herron, William H., Geological Survey.

Hesse, Conrad E., Weather Bureau.
 Hill, Edwin A., U. S. Patent Office.
 Hill, George A., Naval Observatory.
 Hill, Robert Thomas, Geological Survey.
 Hillebrand, William F., Geological Survey.
 Hillyer, William Eldridge, 1365 Whitney Avenue, N.W.
 Hitchcock, Albert Spear, Department of Agriculture.
 Hitchcock, Frank H., Department of Commerce.
 Hitz, John, 1601-3 Thirty-fifth Street.
 Hodge, Frederick Webb, Smithsonian Institution.
 Hodgkins, H. L., Columbian University.
 Hodgkins, William C., Coast and Geodetic Survey.
 Hogan, Mrs. Louise E., Box 205.
 Holmes, Wm. H., National Museum.
 Holt, H. P. R., Cosmos Club.
 Hopkins, A. D., Department of Agriculture.
 Hopkins, N. Monroe, Columbian University.
 Hough, Walter, National Museum.
 Howard, Leland O., Cosmos Club.
 Howard, Mrs. Leland O., 2026 Hillyer Place, N.W.
 Howe, Ernest, Geological Survey.
 Howell, Edwin E., 612 17th Street, N.W.
 Hume, Frank, 454 Pennsylvania Avenue.
 Hunter, Walter D., Department of Agriculture.
 Hutcheson, David, Library of Congress.
 Hyde, Miss Edith E., National Museum.
 Hyde, John, Department of Agriculture.
 James, Mrs. Sarah S., 1517 O Street, S.E.
 Kearney, Thomas H., Jr., Department of Agriculture.
 Kendall, William C., U. S. Fish Commission.
 Kern, Josiah Quincy, 507 6th Street, N.W.
 Kimball, S. I., Treasury Department.
 King, A. F. A., 1315 Massachusetts Avenue, N.W.
 King, F. H., 205 9th Street, S.W.
 King, Theo. Ingalls, Naval Observatory.
 Kinsler, John H., Department of Agriculture.
 Kirk, Hyland C., 211 6th Street, N.E.
 Knapp, Martin A., Interstate Commerce Commission.
 Kober, George Martin, 1600 T Street, N.W.
 Krogstad, Henry, 1524 K Street, N.W.
 LaFlesche, Francis, 214 1st Street, S.E.
 Lamb, Daniel S., 800 10th Street, N.W.
 Langley, S. P., Smithsonian Institution.
 Lawrence, J. P. S., Navy Department.
 Laws, Samuel S., 1733 Q Street, N.W.

Lee, Willis T., Geological Survey.
 Leiter, L. Z., Dupont Circle.
 Lindenkohl, Adolphus, Coast and Geodetic Survey.
 Lindenkohl, Henry, Coast and Geodetic Survey.
 Lindgren, Waldemar, Geological Survey.
 Littell, Frank B., Naval Observatory.
 Littlehales, G. W., Hydrographic Office.
 Lloyd, Morton G., National Bureau of Standards.
 Lucas, Anthony F., 1406 16th Street, N.W.
 Luebker, Otto, Colorado Building.
 McBride, George W., P. O. Box 173.
 McGee, Anita Newcomb, 1901 Baltimore Street.
 McGuire, Joseph D., 1834 16th Street.
 McKenney, Randolph Evans Bender, Department of Agriculture.
 McLanahan, George William, 1601 21st Street, N.W.
 McLaughlin, Thomas N., 1226 N Street, N.W.
 Magill, Arthur E., Hotel Stratford.
 Mann, B. Pickman, 1918 Sunderland Place.
 Manning, Miss Eva, 1330 Columbia Road.
 Marindin, Henry Louis, Coast and Geodetic Survey.
 Marlatt, Charles L., Department of Agriculture.
 Martin, Artemas, Coast and Geodetic Survey.
 Marvin, C. F., Weather Bureau.
 Mason, Otis T., National Museum.
 Matthes, Francois E., Geological Survey.
 Matthews, Washington, 1262 New Hampshire Avenue.
 Maxon, William R., National Museum.
 Maxwell, George H., 1827 Phelps Place.
 Maynard, George C., 1407 15th Street.
 Maynard, Washburn, Treasury Department.
 Mead, Elwood, Department of Agriculture.
 Mendenhall, Walter C., Geological Survey.
 Merriam, C. Hart, Department of Agriculture.
 Miller, Frederick A., 2201 Massachusetts Avenue.
 Miller, Gerrit S., National Museum.
 Mitchell, Guy E., 1419 F Street N.W.
 Momsen, Hart, Census Office.
 Moore, George T., Department of Agriculture.
 Moore, Willis L., Weather Bureau.
 Morris, Edward L., Washington High School.
 Morton, George L., Room 256, Patent Office.
 Mosman, Alonzo T., Coast and Geodetic Survey.
 Motter, Murray Galt, 1815 Belmont Avenue.
 Muncaster, Stewart Brown, 907 Sixteenth Street, N.W.
 Munroe, C. E., Columbian University.

Murray-Aaron, Eugene, Lanier Heights.
 Newcomb, S., 1620 P Street, N.W.
 Newell, F. H., Geological Survey.
 Norton, J. B., Department of Agriculture.
 Noyes, Isaac Pitman, 409 4th Street, S.E.
 Nutting, Perley G., National Bureau of Standards.
 Oberholser, Harry Church, Department of Agriculture.
 Ogden, Herbert G., Coast and Geodetic Survey.
 Orton, W. A., Department of Agriculture.
 Osgood, Wilfred H., Department of Agriculture.
 Owen, Frederick D., No. 3 Grant Place.
 Page, Logan Waller, Department of Agriculture.
 Palmer, Edward, Department of Agriculture.
 Parker, Edward W., U. S. Geological Survey.
 Parsons, Francis H., 210 1st Street, S.E.
 Patrick, George E., Department of Agriculture.
 Patten, Miss Juliet, 2212 R Street, N.W.
 Patterson, Mrs. Flora Wambaugh, Department of Agriculture.
 Paul, Henry M., 2015 Kalorama Avenue.
 Perkins, Edmund T., U. S. Geological Survey.
 Perkins, Frank W., U. S. Coast and Geodetic Survey.
 Pierce, Perry Benjamin, Patent Office.
 Pilling, J. W., 1301 Massachusetts Avenue, N.W.
 Pillsbury, J. E., Navy Department.
 Pinchot, Gifford, Department of Agriculture.
 Pinchot, J. W., 1615 Rhode Island Avenue, N.W.
 Powers, LeGrand, 3007 13th Street, N.W.
 Prentiss, Daniel Webster, 1101 14th Street, N.W.
 Price, Thomas Malcolm, Department of Agriculture.
 Quaintance, A. L., Department of Agriculture.
 Rand, C. F., 1228 15th Street, N.W.
 Rankin, J. M., Atlaptic Building.
 Ransome, Frederick L., U. S. Geological Survey.
 Rathbun, Miss Mary Jane, Smithsonian Institution.
 Rathbun, Richard, Smithsonian Institution.
 Reber, Samuel, War Department.
 Richardson, Charles Williamson, 1102 L Street, N.W.
 Richardson, Miss Harriet, Smithsonian Institution.
 Ricker, Percy Leroy, Department of Agriculture.
 Roberts, Wm. F., 730 15th Street.
 Robins, William Littleton, 1700 13th Street, N.W.
 Rorer, James B., 1460 Staughton Street.
 Rosa, Edward B., National Bureau of Standards.
 Rose, Joseph N., U. S. National Museum.
 Rosenau, Milton J., Marine Hospital Service.

- Roth, Filibert, Department of Agriculture.
 Rothermel, John J., Eastern High School.
 Root, Elihu, War Department.
 Ruffin, Sterling, 1023 Vermont Avenue.
 Rutter, Frank Roy, Department of Agriculture.
 Saegmuller, G. N., 132 Maryland Avenue, S.W.
 Salmon, Daniel E., Department of Agriculture.
 Saunders, Wm. H., 1407 F Street, N.W.
 Schmeckebier, Laurence Frederick, Geological Survey.
 Schmitt, Ewald, 311 Florida Avenue, N.W.
 Schuchert, Charles, U. S. National Museum.
 Schwarz, E. A., Department of Agriculture.
 Scofield, Carl S., Department of Agriculture.
 Scott, W. M., Department of Agriculture.
 Seaman, W. H., 1424 11th Street, N.W.
 Searle, George M., Catholic University.
 Shamel, Archibald D., 1227 Princeton Street, N.W.
 Shear, Cornelius L., Department of Agriculture.
 Shidy, Leland P., Coast and Geodetic Survey.
 Shute, D. K., 1101 13th Street, N.W.
 Sigsbee, Charles D., Navy Department.
 Simpson, John Crayke, Government Hospital for Insane.
 Sinclair, Cephas Hampstone, Coast and Geodetic Survey.
 Skinner, Aaron Nichols, Naval Observatory.
 Smillie, Thomas W., National Museum.
 Smith, Erwin F., Department of Agriculture.
 Smith, George Otis, Geological Survey.
 Smith, Hugh M., Bureau of Fisheries.
 Smith, Middleton, 1619 19th Street, N.W.
 Smith, William Sidney Tangier, Geological Survey.
 Smoot, Edgar Kenneth, 1511 Rhode Island Avenue.
 Snow, Charles Carleton, 1739 9th Street, N.W.
 Spear, Ellis, 1601 Laurel Avenue, Mt. Pleasant.
 Spencer, Arthur Coe, Geological Survey.
 Spillman, William Jasper, Department of Agriculture.
 Sprigg, William Mercer, 1015 16th Street, N.W.
 Stanton, Timothy W., Geological Survey.
 Steiger, George, Geological Survey.
 Stejneger, Leonhard, U. S. National Museum.
 Sternberg, George M., War Department.
 Stetson, George R., 1441 Massachusetts Avenue, N.W.
 Stevenson, Mrs. Matilda C., Bureau of American Ethnology.
 Stiles, Charles Wardell, U. S. Public Health and Marine Hospital Service.
 Stokes, Henry Newlin, Department of Agriculture.

Stone, Isaac S., 1618 Rhode Island Avenue, N.W.
 Stose, George W., Geological Survey.
 Stratton, Samuel W., National Bureau of Standards.
 Suter, Frank, 1524 31st Street, N.W.
 Swingle, Walter T., Department of Agriculture.
 Tainter, Charles Sumner, 1405 G Street, N.W.
 Talbott, Mrs. Laura Osborne, 1523 L Street, N.W.
 Tanner, Zera L., The Cairo.
 Taylor, Henry W., Box 418, House of Representatives.
 Taylor, William Alton, 55 Q Street, N.E.
 Thayer, Rufus H., 930 F Street, N.W.
 Thiessen, Alfred Henry, 2017 I Street, N.W.
 Thompson, Almon Harris, 1729 12th Street, N.W.
 Thompson, James David, Library of Congress.
 Tittmann, Otto H., Coast and Geodetic Survey.
 Titus, E. S. G., Department of Agriculture.
 Townsend, Charles O., Department of Agriculture.
 True, A. C., Department of Agriculture.
 True, Fred. W., National Museum.
 True, Rodney H., Department of Agriculture.
 Truesdell, George, Room 22, Wyatt Building.
 Vaughn, T. Wayland, Geological Survey.
 Veatch, Arthur Gifford, U. S. Geological Survey.
 Vinal, W. Irving, 1106 East Capitol Street.
 Wadsworth, Herbert, 1801 Massachusetts Avenue, N.W.
 Waidner, Charles W., Nat. Bureau of Standards.
 Waite, M. B., Department of Agriculture.
 Walcott, Charles D., Geological Survey.
 Walker, Albert M., Geological Survey.
 Walpole, Frederick A., Department of Agriculture.
 Walsh, Thomas F., Le Roy and Phelps Place.
 Ward, Lester F., Geological Survey.
 Warder, Robert B., Howard University.
 Wead, Charles K., Patent Office.
 Webber, Herbert J., Department of Agriculture.
 Weed, W. H., U. S. Geological Survey.
 Welch, George B., 1344 G Street, N.W.
 Wendling, George R., Cosmos Club.
 Wheeler, Charles Fay, Department of Agriculture.
 Whelpley, James D., 1417 G Street, N.W.
 White, David, Geological Survey.
 White, Mrs. Mary Bell, 1615 New Hampshire Avenue.
 White, Oscar W., 1116 F Street, N.W.
 Whiteside, Samuel M., 1748 P Street, N.W.
 Whittemore, Williams C., 1526 New Hampshire Avenue.

GEOGRAPHICAL DISTRIBUTION—D. C.—FLA.

Wilcox, Mrs. Aaron M., The Arlington.
Wiley, Harvey W., Department of Agriculture.
Wilkins, Miss Lewanna, Eastern High School.
Willis, Bailey, Geological Survey.
Wilson, Alisan, The Lenox.
Wilson, John C., Cosmos Club.
Wilson, Mrs. Thomas, 1218 Connecticut Avenue, N.W.
Winter, Mahlon A., 339 Pennsylvania Avenue.
Witherspoon, Thomas A., Department of Interior.
Wolff, Frank A., Jr., 1429 R Street, N.W.
Woodhull, Maxwell Van Zandt, 2033 G Street.
Woods, Albert F., Department of Agriculture.
Woodworth, George Keen, Patent Office.
Wright, Carroll D., Department of Labor.
Wyman, Walter, Public Health and Marine Hospital Service.
Yarrow, H. C., 814 17th Street, N.W.

FLORIDA.

DE LAND.

Baerecke, John F., Stetson University.
Osborne, Frank Russell, Stetson University.

FERNANDINA.

Carnegie, Thomas Morrison, Dungeness.

JACKSONVILLE.

Hammatt, Clarence S.
Souvielle, Mathieu, Box 355.
Souvielle, Mrs. Mathieu, Box 355.

KEY WEST.

Murray, Robert D., Marine Hospital.

LAKE CITY.

Dorsey, Herbert G., Florida Agricultural College.
Gossard, Harry Arthur, Florida Agricultural College.

MIAMI.

Rolfs, P. H.

ST. AUGUSTINE.

McLain, Louis Randolph, Florida Engineering Co.

TALLAHASSEE.

Bierly, H. E., State Seminary.

WEST PALM BEACH.

Potter, Richard B.

GEORGIA.

ATHENS.

Patterson, Andrew H., University of Georgia.
Snelling, Charles Mercer, University of Georgia.
White, H. C., University of Georgia.
Woodberry, Miss Rosa Louise, Lucy Cobb Institute.

ATLANTA.

Black, Homer V., Georgia School of Technology.
Du Bois, William E. B., Atlanta University.
Ewell, Ervin E., care German Kali Works.
Ford, Arthur H., Georgia School of Technology.
Francis, Charles Kenworthy, Georgia School of Technology.
Furlow, Floyd Charles, Georgia School of Technology.
Walker, R. M., 713 Prudential Building.
Webster, Edgar H., Atlanta University.
Yeates, W. S.

AUGUSTA.

Lyle, David A., Augusta Arsenal.
Martin, Wm. L.

CARTERSVILLE.

Granger, Arthur O.

DAHLONEGA.

Avis, Edward S.

GROVETOWN.

Steiner, Roland.

MACON.

McHatton, Henry.
Sellers, James Freeman, Mercer University.

OCILLA.

Herty, Charles H.

OXFORD.

Duncan, Fred. N., Emory College.

SAVANNAH.

Nunn, R. J., 5 East York Street.
Wesson, David, care Southern Cotton Oil Co.

STONE MOUNTAIN.

Carter, William Harrison.

HAWAII.

HONOLULU.

Amweg, Frederick James, Box 537.
Smith, Jared G., Agricultural Experiment Station.

GEOGRAPHICAL DISTRIBUTION—IDAHO—ILL.

Van Dine, Delos Lewis, Agricultural Experiment Station.
Wilson, Robert Lee, Box 274.

IDAHO.

BOISE.

Wiley, Andrew J., Boise-Payette River Electric Power Co.
Wright, Cary, Box 654.

ILLINOIS.

ARLINGTON HEIGHTS.

Best, John E.

BLOOMINGTON.

Brown, George P.
Guthrie, William E.
Hartzell, J. Culver, Illinois Wesleyan University.
Reagan, Albert B., 327 South Lincoln Street.

BRIMFIELD.

Knapp, Alfred A.

CAIRO.

Miller, John A., 2500 Park Avenue.

CARMI.

Berry, Daniel.

CHAMPAIGN.

Davenport, Eugene, University of Illinois.
Gleason, H. Allan, John Street.
Kemp, George T., University of Illinois.
Shattuck, Samuel Walker, University of Illinois.

CHARLESTON.

Caldwell, Otis W., State Normal School.

CHICAGO.

Allen, Miss Jessie Blount, University of Chicago.
Anderson, Alexander P., American Cereal Co., Monadnock Building.
Arnold, Bion J., 4128 Prairie Avenue.
Ayer, Edward Everett, 915 Old Colony Building.
Barnes, Charles Reid, University of Chicago.
Barnhart, Arthur M., 185 Monroe Street.
Bement, A., 218 La Salle Street.
Bethea, Solomon Hix, Chicago Club.
Boggs, Lemuel S., 1000 Isabella Building.
Brill, George M., 1134 Marquette Building.
Carus, Paul, 324 Dearborn Street.
Chamberlain, Charles Joseph, University of Chicago.

- Chamberlain, Paul M., Lewis Institute.
 Chamberlin, Rollin T., Hyde Park Hotel.
 Chamberlin, T. C., Hyde Park Hotel.
 Chanute, O., 413 East Huron Street.
 Child, Charles Manning, University of Chicago.
 Clark, Howard Walton, Field Columbian Museum.
 Cloud, John W., 974 The Rookery.
 Copeland, Edw. B., 653 East 57th Street.
 Coulter, John M., University of Chicago.
 Craig, Wallace, University of Chicago.
 Davenport, Charles Benedict, University of Chicago.
 Davis, Bradley Moore, University of Chicago.
 Davis, Charles Gilbert, 31 Washington Street.
 Davis, Nathan Smith, 65 Randolph Street.
 Davis, N. S., Jr., 291 Huron Street.
 Delano, Frederic A., 209 Adams Street.
 Dixon, Zella A., University of Chicago.
 Dorsey, George A., Field Columbian Museum.
 Doubt, Thomas Eaton, 693 East 57th Street.
 Foote, Allen R., Home Insurance Building.
 Fuller, Charles Gordon, Reliance Building.
 Hall, Winfield Scott, 2431 Dearborn Street.
 Harper, Wm. R., University of Chicago.
 Harvey, Nathan Albert, 631 West 65th Place, Englewood.
 Head, W. R., 5467 Jefferson Avenue.
 Hefferan, Miss Mary, University of Chicago.
 Hektoen, Ludwig, University of Chicago.
 Henius, Max, 294 So. Water Street.
 Hellick, Chauncey Graham, 203 Washington Street.
 Holferty, George M., University of Chicago.
 Hopkins, Anderson H., John Crerar Library.
 Howerth, Ira Woods, University of Chicago.
 Howland, Howard N., 116 South 52d Avenue.
 Iddings, Joseph P., University of Chicago.
 Johnson, Frank Seward, 2521 Prairie Avenue.
 Jordan, Edwin Oakes, University of Chicago.
 Kinsley, Carl, Quadrangle Club.
 Klebs, Arnold C., 100 State Street.
 Land, William Jesse Goad, Department Botany, Univ. Chicago.
 Lillie, Frank R., University of Chicago.
 Linder, Oliver A., 35 Clark Street.
 Logan, F. G., 2919 Prairie Avenue.
 Long, John H., 2421 Dearborn Street.
 Lyman, James, 1047 Monadnock Building.
 McArthur, Lewis L., 100 State Street.

GEOGRAPHICAL DISTRIBUTION—ILL.

McKeown, W. W., Jr., 160 Washington Street.
 Merriman, C. C., 1910 Surf Street.
 Michelson, A. A., University of Chicago.
 Mohr, Louis, 32 Illinois Street.
 Moore, Eliakim H., University of Chicago.
 Moyer, Harold N., 103 State Street.
 Moulton, Forest Ray, University of Chicago.
 Myers, Geo. W., 6026 Monroe Avenue.
 Nef, J. U., University of Chicago.
 Neiler, Samuel Graham, 1409 Manhattan Building.
 Otis, Spencer, 903 Plymouth Fisher Building.
 Owen, Charles Lorin, Field Columbian Museum.
 Parker, Miss Florence, 10340 Longwood Avenue.
 Pettersen, C. A., 2395 Lowell Avenue.
 Plapp, Frederick William, 2549 No. 42d Ave., Irving Park Sta.
 Pond, Raymond H., Northwestern University Building.
 Porter, Fred. B., 4911 Champlain Avenue.
 Salisbury, R. D., University of Chicago.
 Schobinger, John J., 2101 Indiana Avenue.
 Seymour, Paul Henry, 215 East 61st Street.
 Skiff, F. J. V., Field Columbian Museum.
 Slonaker, James R., University of Chicago.
 Smallwood, Miss Mabel Elizabeth, 430 West Adams Street.
 Smith, Alexander, University of Chicago.
 Smith, James Hervey, 217 North Central Avenue.
 Smith, Warren Rufus, Lewis Institute.
 Starr, Frederick, University of Chicago.
 Stevenson, Francis L., Electrical Engineer, Deering Division, International Harvester Co., 79 Lincoln Avenue.
 Stieglitz, Julius, University of Chicago.
 Stillhamer, Arthur G., 5809 Jackson Avenue.
 Wainwright, Jacob T., P. O. Box 774.
 Walker, George C., Room 367, Rookery Building.
 Ward, Henry A., 620 Division Street.
 Wheeler, C. Gilbert, 214 State Street.
 Whitman, Charles O., University of Chicago.
 Williams, Benezette, 153 La Salle Street.
 Willis, Bernard Darwin, 70-86 West Jackson Boulevard.
 Williston, Samuel W., University of Chicago.
 Wylie, Robert Bradford, University of Chicago.

DECATUR.

Galloway, Thomas W., James Milliken University.

DE KALB.

Charles, Fred. L.

GEOGRAPHICAL DISTRIBUTION—ILL.

DIXON.

Garrison, Harriet E., 105 E. Second Street.

EVANSTON.

Atwell, Charles B., Northwestern University.

Brayton, Sarah H., "The Hereford."

Crew, Henry, Northwestern University.

Crook, Alja Robinson, 1914 Sheridan Road.

Eccles, David C., Northwestern University.

Fisk, Herbert F., Northwestern University.

Grant, U. S., Northwestern University.

Hough, G. W., Northwestern University.

Murray, Chas. R., 1207 Maple Avenue.

Young, A. V. E., Northwestern University.

GALESBURG.

Griffith, Herbert Eugene, Knox College.

Longden, A. C., Knox College.

GREENVILLE.

Mojonnier, Timothy.

HIGHLAND PARK.

Grover, Edwin Osgood.

JACKSONVILLE.

Overton, James Bertram, Illinois College.

Pitner, Thomas J., Illinois College.

Tingle, J. Bishop, Illinois College.

KANKAKEE.

Neff, Isaac E., High School.

LA GRANGE.

Hoskins, William.

Runyon, William Henry, Lyons Township High School.

LAKE FOREST.

McNeill, Malcolm, Lake Forest University.

Needham, James G., Lake Forest University.

Stevens, Frederick W., Lake Forest University.

Turck, Fenton B., 362 Dearborn Avenue.

LINCOLN.

Oglevee, Christopher S., Lincoln College.

MACOMB.

Roberts, H. L., Western Illinois State Normal School.

MOMENCE.

Little, Henry P., Union Schools.

GEOGRAPHICAL DISTRIBUTION—ILL.

MONMOUTH.

Bowlus, E. Lingan, Monmouth College.

MORGAN PARK.

Schobinger, John J.

MT. CARMEL.

Mt. Carmel Scientific Society.

OAK PARK.

Maxwell, Fred. B.

PALMER.

Simpson, Jesse P.

PEORIA.

Sedgwick, Howard M., 512 Woolner Building.

QUINCY.

Montgomery, Edmund B., 134 North 8th Street.

ROCKFORD.

Lichty, Daniel, Masonic Temple.

ROCK ISLAND.

Lusk, James L., U. S. Engineer's Office.

SPRINGFIELD.

Clements, George E., 522 Capitol Avenue.

TAYLORVILLE.

Andrews, William Edward, 700 South Clay Street.

UPPER ALTON.

McNeil, Hiram Colver, Shurtleff College.

URBANA.

Bevier, Miss Isabel, University of Illinois.

Brooks, Morgan, University of Illinois.

Crandall, Charles S., 1108 Oregon Street.

Dexter, E. G., University of Illinois.

Grindley, Harry Sands, University of Illinois.

Hart, Charles A., University of Illinois.

Miner, James B., University of Illinois.

Palmer, Arthur William, 804 West Green Street.

Ricker, N. Clifford, University of Illinois.

Sager, Fred. Anson, University of Illinois.

Smith, Frank, University of Illinois.

Talbot, Arthur N., University of Illinois.

Webster, F. M., 806 W. Springfield Avenue.

WAUKEGAN.

Barwell, John William.
Carter, James Madison G.

WHEATON.

Leonard, John W.
Russell, John B., Superintendent of Schools.

WILMETTE.

Sharpe, Richard W.

INDIANA.

BLOOMINGTON.

Aley, Robert J., Indiana University.
Andrews, Frank Marion, Indiana University.
Beede, Joshua W., Indiana University.
Bergström, John Andrew, University of Indiana.
Bryan, William L., University of Indiana.
Cumings, Edgar R.
Eigenmann, Carl H., University of Indiana.
Foley, Arthur Lee, University of Indiana.
King, Cyrus A., University of Indiana.
Knipp, Charles Tobias, University of Indiana.
Lyons, Robert E., University of Indiana.
Marsters, Vernon, University of Indiana.
Miller, John A., Indiana University.
Moenkhaus, Wm. J.
Mottier, David M., University of Indiana.
Ward, Louis Clinton.
Weatherly, Ulysses Grant, University of Indiana.

BLUFFTON.

Williamson, Edward Bruce.

CRAWFORDSVILLE.

Bodine, Donaldson, Wabash College.
Kent, Norton A., Wabash College.
Thomas, M. B.

EVANSVILLE.

Evans, Samuel G., 211 Main Street.

FORT WAYNE.

Kuhne, F. W., 19 Court Street.
Ladd, George Tallman, care Bass Foundry and Machine Co.
Porter, Miles F., 207 W. Wayne Street.
Siemon, Rudolf, 22 East Jefferson Street.

Taylor, Frank B., 391 Fairfield Avenue.
Taylor, Robert S., Box 2019.

FRANKLIN.

Owen, D. A.

GREENCASTLE.

Cook, Melville T., De Pauw University.

INDIANAPOLIS.

Bell, Guido, 431 East Ohio Street.
Bruner, Henry Lane, Butler College.
Butler, A. W., Board of State Charities.
Dunning, Lehman H., 224 North Meridian Street.
Hadley, Artemus N., Box 313.
Rietz, Henry Lewis, University of Indianapolis.
Sterne, Albert E., "Norways."
Thompson, J. L., 22 West Ohio Street.
Varney, A. L., 143 Woodruff Place.
Wright, John S., Eli Lilly and Company.

LAFAYETTE.

Arthur, J. C.
Golden, Miss Katherine E., Purdue University.
Goss, William F. M.
Green, Arthur L., Purdue University.
Meigs, Miss Emily.
Snyder, Miss Lillian.
Waldo, Clarence A., Purdue University.

MOORE'S HILL.

Bigney, Andrew J., Moore's Hill College.

NEW ALBANY.

Greene, G. K., 127 West Market Street.
Harris, Robert Wayne, 621 Vincennes Street.

[RENSSELAER.

Headlee, T. J.

RICHMOND.

Dennis, David Worth, Earlham College.
Lindley, Ernest H., University of Indiana.
Sackett, Robert L., Earlham College.

ROCHESTER.

Watson, Joseph Ralph.

TERRE HAUTE.

Dryer, Charles R., State Normal School.
Gray, Thomas.
Johonnott, Edwin Sheldon, Rose Polytechnic Institute.
Mees, Carl Leo, Rose Polytechnic Institute.
Patterson, A. M., Rose Polytechnic Institute.
Wagner, Frank C., Rose Polytechnic Institute.

VALPARAISO.

Weems, Mason Locke, Valparaiso College.

INDIAN TERRITORY.

AFTON.

Harper, R. H.

HARTSHORNE.

Bond, R. I.

IOWA.

ALLISON.

Burroughs, Paul L.

AMES.

Beyer, Samuel W., Agricultural College.
Guthrie, Joseph E., Iowa State College.
Lanphear, Burton S., Iowa State College.
Pammel, L. H., Agricultural College.
Spinney, L. B., Agricultural College.
Summers, Henry E., Agricultural College.
Weems, J. B., Agricultural College.
Williams, Ira Abraham, Iowa State College.

ARMSTRONG.

Cratty, R. I.

BURLINGTON.

Ricker, Maurice, High School.

CEDAR RAPIDS.

Fracker, George C., Coe College.

CLARINDA.

Witte, Max Ernest, Clarinda State Hospital.

CLINTON.

Farnsworth, Philo J.

DAVENPORT.

Putnam, Miss Elizabeth D.
Putnam, Henry St. Clair.

DES MOINES.

Grabill, H. P., 1004 Enas Avenue.
Higgins, Lafayette, West D. M. High School.
Kinney, Charles Noyes, Drake University.
Still, Geo. A., 1428 Locust Street.

DUBUQUE.

Herrmann, Richard, Institute Science and Arts.
Keane, Rt. Rev. John J.
Ruete, Otto M., 721 Bluff Street.

EPWORTH.

Anderson, Frank P.

FAIRFIELD.

Clarke, James Frederick.
Gable, George D., Parsons College.
Heald, Fred. DeForest, Parsons College.

FARLEY.

McGee, D. W.
McGee, Miss Emma R., Box 197.

FAYETTE.

Fink, Bruce, Upper Iowa University.

GLENWOOD.

Dean, Seth.

GRINNELL.

Hill, Bruce V.

GRUNDY CENTER.

McAlvin, J. G.

IOWA CITY.

Calvin, Samuel.
Fitzpatrick, Thomas J.
Hobby, C. M.
Houser, Gilbert L., University.
Macbride, Thomas H.
MacLean, George E., State University.
Nutting, Charles C., University.
Rockwood, Elbert W., University.
Seashore, Carl E., University.
Shimek, Bohumil, State University.

Shrader, John Clinton, State Board of Health.
 Smith, Arthur George, University.
 Stromsten, Frank A., State University.
 Teeters, Wilbur John, University.
 Veblen, Andrew A., University.
 Weld, Laenas Gifford, State University.
 Williams, Miss Mabel Clare.

INDIANOLA.

Tilton, John Littlefield, Simpson College.

KEOKUK.

Meigs, Montgomery, Office of D. M. R. Canal.

MT. PLEASANT.

Edwards, John W., Iowa Wesleyan University

MT. VERNON.

Collin, Alonzo, Cornell College.
 Iorns, Martin J.

MUSCATINE.

Stein, Simon G.

NEWTON.

Lufkin, Albert.

SIOUX CITY.

Jepson, Wm.
 Stauffer, Thomas F., 200 11th Street.

STORM LAKE.

Voris, Floyd Thomas, Buena Vista College.

TRIPOLI.

Jungblut, Herman C.

VINTON.

Luckey, John Eddy.

WHITTEN.

McCoy, Lucinius S.

KANSAS.

ATCHISON.

Knerr, Ellsworth B., Midland College.

AUGUSTA.

Pratt, Charles W.

COLDWATER.

Pyle, Miss Effie B.

GEOGRAPHICAL DISTRIBUTION—KANS.

CUBA.

Hall, Fred. C., Jr.

EMPORIA.

Iden, Thomas M., State Normal School.

ENTERPRISE.

Hoffman, Christian B.

IOLA.

Rissmann, Otto, Cherokee-Lanyon Spelter Company.
Terrell, Arthur Davis, 624 East Madison Street.

KANSAS CITY.

Brooks, Albert A., High School.

LAWRENCE.

Ashton, Charles Hamilton, University of Kansas.
Bartow, Edward, University of Kansas.
Bailey, E. H. S., University of Kansas.
Blackmar, Frank W., University of Kansas.
Cady, Hamilton Perkins, University of Kansas.
Diemer, Hugo, University of Kansas.
Dyche, Lewis Lindsay, University of Kansas.
Franklin, Edward Curtis, University of Kansas.
Hunter, Samuel John, University of Kansas.
Marvin, Frank O., University of Kansas.
McClung, Clarence E., University of Kansas.
Miller, Ephraim, University of Kansas.
Newson, Henry Byron, University of Kansas.
Rice, Martin Everett, University of Kansas.
Snow, F. H., University of Kansas.
Sternberg, Charles Hazelius.
Van der Vries, John N., University of Kansas.

LINDSBORG.

Johns, Carl, Bethany College.
Welin, John E., Bethany College.

MCPHERSON.

Harnly, Henry Jacob, McPherson College.

MANHATTAN.

Walters, John Daniel, Kansas State Agricultural College.
Willard, Julius Terrass, State Experiment Station.

OTTAWA.

Ward, Milan L.
Yates, J. A., Ottawa University.

SENECA.

Hayes, Noah.

TOLEDO.

Smith, E. R.

TOPEKA.

Cooper, James Campbell, Room 5, Veale Block.

Grimsley, George Perry, Washburn College.

Menninger, Charles Frederic, 1251 Topeka Avenue.

Patrick, Frank, 601 Kansas Avenue.

Smyth, Bernard B., Academy of Science.

Thompson, Alton H., 721 Kansas Avenue.

WINFIELD.

Dunlevy, Robert Baldwin, Kansas State Normal College.

KENTUCKY.

BOWLING GREEN.

Crump, M. H.

DANVILLE.

Gordon, Clarence McC., Centre College.

Nelson, A. B., Centre College.

Roberts, William C., Centre College.

EARLINGTON.

Atkinson, John B.

FRANKLIN.

Guthrie, William Alvis.

GEORGETOWN.

Kesler, John L.

LEXINGTON.

Miller, Arthur M., State College.

Scovell, M. A., Agricultural Experiment Station.

LOUISVILLE.

Cobb, Arthur, 600 Equitable Building.

de Funiak, Frederick, 204 East Chestnut Street.

Derby, George McClellan.

Hubley, G. Wilbur, Electric Light Company.

Mark, E. H., Center and Walnut Streets.

Marple, Charles A., 743 Third Avenue.

Marvin, Joseph B., Kentucky University.
Reynolds, Dudley S., 304 W. Chestnut Street.
Thruston, R. C. Ballard, Ballard and Ballard Company.

MAYSVILLE.

Pickett, Thomas E.

SHELBYVILLE.

Hogeboom, Miss Ellen C.

LOUISIANA.

BATON ROUGE.

Coates, Charles E., Louisiana State University.
Dalrymple, W. H., State University and Agr. and Mech. College.
Kretz, Charles Henry, State University and Agr. and Mech. College.
Morgan, H. A., State University.

HAMMOND.

Millard, Charles S.

NEW ORLEANS.

Anderson, Douglas S., Tulane University.
Ayres, Brown, Tulane University.
Brice, Albert G., 901 Hennen Building.
Browne, Charles A., Jr., Audubon Park.
Chaillé, Stanford E., Tulane University.
Cline, Isaac M., Weather Bureau.
Dixon, Brandt B., Newcomb College.
Donovan, Cornelius, Custom House.
Low, Clarence F., Liverpool, London, Globe Building.
Lion, Leon Elie, 1010 Burgundy Street.
Matas, Rudolph, Tulane University.
Smith, J. C., 131 Carondelet Street.
Smith, William Benjamin, Tulane University.
Stubbs, W. C., Audubon Park.
Wilkinson, Levi Washington, Tulane University.

MAINE.

AUGUSTA.

Hichborn, C. S.

BANGOR.

Adams, C. E., 29 West Broadway.
Coe, Thomas U.
Foster, George W., Eastern Maine Insane Hospital.

BATH.

Hervey, A. B.

BRUNSWICK.

Lee, Leslie A., Bowdoin College.

Moody, William Albion, Bowdoin College.

Robinson, Franklin C., Bowdoin College.

CARIBOU.

Nylander, Olof O., Box 165.

LEWISTON.

Chadbourn, Erlon R.

ORONO.

Hart, James S., University of Maine.

Merrill, Lucius H., University of Maine.

Munson, Welton M., University of Maine.

Stevens, James S., University of Maine.

Webb, Howard Scott, University of Maine.

Woods, Charles D., University of Maine.

PORTLAND.

Baxter, James Phinney, Public Library.

Sweat, Mrs. Margaret J. M., 103 Spring St.

RUMFORD FALLS.

Mixer, Chas. Adam, Rumford Falls Power Co.

WISCASSETT.

Farley, Godfrey Pearson, W. W. & F. R.R. Co.

YARMOUTHVILLE.

Hammond, George W.

MARYLAND.

ANNAPOLIS.

Brown, S. J., United States Naval Academy.

See, T. J. J., U. S. Naval Academy.

Updegraff, Milton, U. S. Naval Academy.

ANNAPOLIS JUNCTION.

Dorsey, N. Ernest.

BALTIMORE.

Abel, John J., Johns Hopkins University.

Ashcraft, A. M., P. O. Box 742.

Bardeen, Charles Russell, Anatomical Lab., Wolfe and Monument Streets.

Barrie, George, Johns Hopkins University.
 Brooks, William Keith, Johns Hopkins University.
 Clark, Miss May, The Woman's College.
 Clarke, William Bullock, Johns Hopkins University.
 Cohen, Mendes, 825 North Charles Street.
 Cushing, Harvey, 3 West Franklin Street.
 Dawson, Percy Millard, Johns Hopkins Medical School.
 Edmonds, Richard H., care "Manufacturer's Record."
 Fassig, Oliver Lanard, Johns Hopkins University.
 Franklin, Mrs. C. Ladd, 516 Park Avenue.
 Freeman, T. J. A., Loyola College.
 Friedenwald, Harry, 1029 Madison Street.
 Gates, Fanny Cook, Woman's College.
 Getman, Frederick H., Johns Hopkins University.
 Gilchrist, T. Caspar, 317 No. Charles Street.
 Gilman, Daniel C., Johns Hopkins University.
 Glaser, C., 21 South Gay Street.
 Glenn, William, 1348 Block Street.
 Goucher, John Franklin, The Woman's College.
 Halsted, William Stewart, 1201 Eutaw Place.
 Hammel, William C. A., State Normal School.
 Hebden, Edwin, 730 Colorado Avenue.
 Hemmeter, John C., 1734 Linden Avenue.
 Hooker, Donald R., 1707 Fairmount Avenue.
 Howard, Wm. Lee, 1126 North Calvert Street.
 Howell, William H., Johns Hopkins University.
 Jacobs, Henry Barton, Johns Hopkins Medical School.
 Jewell, Lewis E., Johns Hopkins University.
 Keilholtz, Pierre Otis, Continental Trust Building.
 Keller, Edward, Box 724.
 Kendall, Arthur I., 106 Jackson Place.
 Knower, Henry McE., Johns Hopkins Medical School.
 Latimer, Thomas S., 211 West Monument Street.
 Lehmann, G. W., City Hall Annex.
 Lehmann, Leslie P., 32 South Street.
 Marmor, J. D., 1812 McCulloh Street.
 Martin, George C., Johns Hopkins University.
 Metcalf, Maynard M., The Woman's College.
 Miles, Francis T., 514 Cathedral Street.
 Miller, Benjamin L., Johns Hopkins University.
 Miller, Edgar G., 213 East German Street.
 Noyes, Wm. A., Johns Hopkins University.
 Osler, William, Johns Hopkins University.
 Paton, Stewart, 213 West Monument Street.
 Platt, Walter B., 802 Cathedral Street.

GEOGRAPHICAL DISTRIBUTION—MD.

Pole, Arminius C., 2038 Madison Avenue.
Reid, Harry Fielding, Johns Hopkins University.
Remsen, Ira, Johns Hopkins University.
Shattuck, George Burbank, Johns Hopkins University.
Simon, William, 1348 Block Street.
Springsteen, Harry W., Johns Hopkins University.
Steuart, Arthur, 951 Equitable Building.
Thayer, W. S., 406 Cathedral Street.
Todd, William J., Mt. Washington.
Uhler, Philip R., 254 West Hoffmann Street.
Waters, C. E., Johns Hopkins University.
Welch, William Henry, 935 St. Paul Street.
Williams, J. Whitridge, Johns Hopkins University.
Wood, Robert Williams, Johns Hopkins University.
Young, Walter Douglas, 309 Oakdale Road, Roland Park.

CHELTENHAM.

Schultz, Louis G., Magnetic Observatory.

CHEVY CHASE.

Gordon, Gustavus Ede.

COLLEGE PARK.

Blodgett, Frederick H., Agricultural College.
Ianahan, Henry, Agricultural College.
McDonnell, Henry B., Agricultural College.
Norton, J. B. S., Agricultural College.
Patterson, Harry J., Agricultural College.
Silvester, Richard W., Agricultural College.

CUMBERLAND.

Gordon, Robert H.
Hartley, Frank.

FREDERICK.

Apple, Joseph H., Woman's College.

FROSTBURG.

Randolph, Beverly S., Consolidation Coal Company.

GAITHERSBURG.

Davis, Herman S., International Latitude Station.

KENSINGTON.

Newcomb, H. T.

LAKE ROLAND.

Brooks, Charles Edward.

PORT DEPOSIT.

Harris, Abram W.

MASSACHUSETTS.

AMHERST.

Brooks, William P.
Emerson, Benjamin K., Box 203.
Goessmann, C. A., Agricultural College.
Harris, Elijah P., Amherst College.
Hopkins, Arthur John, Amherst College.
Howard, S. Francis, Agricultural College.
Kimball, Arthur Lalanne, Amherst College.
Loomis, Frederick B., Amherst College.
Lull, Richard S.
Stone, George E., Agricultural College.
Thompson, Joseph Osgood.
Todd, David P., Amherst College.

ANDOVER.

Brewster, Edwin Tenney, Phillips Academy.
Graham, James Chandler, Phillips Academy.
Lansing, John Ernest, Phillips Academy.
Mason, Nellie M., Abbott Academy.
Mills, Frank Smith, 68 Central Street.
Moorehead, Warren K., Phillips Academy.
Williams, Edw. H.

ATTLEBOROUGH.

Sheffield, Geo. S.

AUBURNDALE.

Blake, Francis.

BEVERLY.

Peirce, Benjamin O., 305 Cabot Street.

BOSTON.

Abbot, Samuel L., 90 Mt. Vernon Street.
Atkinson, Edward, 31 Milk Street.
Bangs, Outram, 240 Beacon Street.
Bartlett, Francis, 40 State Street.
Barton, George Hunt, Massachusetts Institute Technology.
Beach, Henry Harris Aubrey, 28 Commonwealth Avenue.
Bigelow, Robert Payne, Massachusetts Institute Technology.
Blackall, Clarence Howard, 1 Somerset Street.
Blake, Clarence J., 226 Marlborough Street.
Blake, John Bapst, 302 Beacon Street.
Bowditch, Charles P., 28 State Street.
Briggs, Edward Cornelius, 129 Marlborough Street.
Burke, Robert E., Mechanic Arts High School.

Burrell, Herbert L., 22 Newbury Street.
 Burton, Alfred E., Massachusetts Institute Technology.
 Cabot, Samuel, 70 Kilby Street.
 Childs, Arthur Edward, 131 State Street.
 Cilley, Frank H., Massachusetts Institute Technology.
 Clarke, Miss Cora H., 91 Mt. Vernon Street.
 Clark, John S., 110 Boylston Street.
 Comstock, Daniel F., 102 Huntington Avenue.
 Crafts, James Mason, Massachusetts Institute Technology.
 Crosby, W. O., Massachusetts Institute Technology.
 Cross, Charles R., Massachusetts Institute Technology.
 Curtis, George C., 64 Crawford Street.
 Davenport, Francis Henry, 419 Boylston Street.
 Dearborn, George Van Ness, Tufts Medical and Dental Schools.
 Dexter, Franklin, Harvard Medical School.
 Dumaresq, Philip K., Sears Building.
 Dwight, Thomas, Harvard Medical School.
 Engleman, George J., 336 Beacon Street.
 Field, Geo. W., Massachusetts Institute Technology.
 Fitz, George W., 483 Beacon Street.
 Gardiner, Edward G., 131 Mt. Vernon Street.
 Gill, Augustus Herman, Massachusetts Institute Technology.
 Goodale, Joseph Lincoln, 397 Beacon Street.
 Goodwin, Harry M., Massachusetts Institute Technology.
 Graham, Douglas, 74 Boylston Street.
 Green, Milbrey, 567 Columbus Avenue.
 Greenough, Charles P., 39 Court Street.
 Hardy, Edward R., 31 Allen Street.
 Harriman, George B., 2A Park Street.
 Haynes, Henry W., 239 Beacon Street.
 Hebbard, Ellery Cola, 122 Huntington Avenue.
 Homans, Amy Morris, 97 Huntington Avenue.
 Hosmer, Sidney, 3 Head Place.
 Hough, Theodore, Massachusetts Institute Technology.
 Hunt, Mrs. Mary H., 23 Trull Street.
 Jaques, William H., 186 Devonshire Street.
 Jeffries, B. Joy, 15 Chestnut Street.
 Jelly, George Frederick, 69 Newbury Street.
 Johnson, Miss Isabel Louise, 467 Massachusetts Avenue.
 Kelsey, Harlan Page, 1150 Tremont Building.
 Kinealy, John H., 1108 Pemberton Building.
 Lancaster, Walter B., 101 Newbury Street.
 Lanza, Gaetano, Massachusetts Institute Technology.
 Lawrence, A. E., 53 Devonshire Street.
 Laws, Frank Arthur, Massachusetts Institute Technology.

Lee, William George, Harvard Medical School.
 Lefavour, Henry, 3 Bremmer Street.
 Lloyd, Andrew J., 310 Boylston Street.
 Lowell, Percival, 53 State Street.
 McQueeney, Francis J., 46 Dartmouth Street.
 Manning, J. Woodward, 1150 Tremont Building.
 Mason, Amos Lawrence, 265 Clarendon Street.
 Matthews, Albert, 145 Beacon Street.
 Means, James, 196 Beacon Street.
 Michael, Mrs. Helen Abbott, 35 West Cedar Street.
 Minns, Miss S., 14 Louisburg Square.
 Minot, Charles Sedgwick, Harvard Medical School.
 Morse, John Torrey, Jr., 16 Fairfield Street, Back Bay.
 Mullan, W. G. R., Boston College.
 Mulliken, Samuel P., Massachusetts Institute Technology.
 Munro, John Cummings, Harvard Medical School.
 Murdoch, John, Public Library.
 Myer, Mrs. Mary H., 44 Mt. Vernon Street.
 Naphen, Henry F., Pemberton Building.
 Niles, Wm. H., Massachusetts Institute Technology.
 Noyes, Arthur A., Massachusetts Institute Technology.
 Osborne, George Abbott, Massachusetts Institute Technology.
 O'Sullivan, Denis T., 761 Harrison Street.
 Paine, Robert Treat, 6 Joy Street.
 Painter, Charles Fairbank, 372 Mulboro Street.
 Palmer, Ezra, 2 Lincoln Hall, Trinity Court.
 Parker, Richard A., 4 Post-Office Square.
 Parker, William L., 312 Dartmouth Street.
 Parks, C. Wellman, Navy Yard.
 Peterson, Sidney, Brighton High School.
 Perry, Thomas S., 312 Marlborough Street.
 Phillips, John C., 299 Berkley Street.
 Porteous, John, 48 Saint Stephen Street.
 Porter, W. Townsend, Harvard Medical School.
 Posse, Baroness Rose, Posse Gymnasium, 206 Massachusetts Ave.
 Prescott, Samuel Cate, Massachusetts Institute Technology.
 Pritchett, Henry S., Massachusetts Institute Technology.
 Putnam, Charles P., 63 Marlborough Street.
 Rhodes, James Ford, 392 Beacon Street.
 Richards, Robert H., Massachusetts Institute Technology.
 Richards, Mrs. Robert H., Massachusetts Institute Technology.
 Richardson, Mark Wyman, 90 Equitable Building.
 Rogers, Miss Annie Fuller, 126 Newbury Street.
 Rollins, William Herbert, 250 Marlborough Street.
 Rotch, T. M., 197 Commonwealth Avenue.

Ruddick, Wm. H.,
 Sedgwick, William Thompson, Massachusetts Institute Technology.
 Sharples, Stephen P., 26 Broad Street.
 Shattuck, Frederick C., Harvard Medical School.
 Shaw, Henry Lyman, 19 Commonwealth Avenue.
 Sheldon, Mrs. J. M. Arms, 18 West Cedar Street.
 Silver, Elmer E., 221 Columbus Avenue.
 Stoddard, George Howland, 457 Marlborough Street.
 Strong, Frederick F., 176 Huntington Avenue.
 Swain, Prof. George Fillmore, Mass. Institute Technology.
 Talbot, Henry P., Massachusetts Institute Technology.
 Taylor, Edward W., Harvard Medical School.
 Thurber, Charles Herbert, 29 Beacon Street.
 Tracy, Edward A., 353 Broadway.
 Tyler, Harry W., 491 Boylston Street.
 Underwood, William Lyman, Massachusetts Institute Technology.
 Wadsworth, Oliver F., Beacon Street.
 Ware, Miss Mary L., 41 Brimmer Street.
 Warren, Charles H., Massachusetts Institute of Technology.
 Watson, William, 107 Marlborough Street.
 Wells, Frank, 178 Devonshire Street.
 Wells, Samuel, 45 Commonwealth Avenue.
 Weyssse, Arthur W., Massachusetts Institute of Technology.
 White, Walter Henry, 220 Marlborough Street.
 Whitney, Willis Rodney, Massachusetts Institute Technology.
 Williams, Charles H., 1069 Boylston Street.
 Williams, Francis H., 505 Beacon Street.
 Williams, Jacob Lafayette, 4 Walnut Street.
 Windsor, Sarah Sweet, 138 Marlborough Street.
 Winslow, Charles E. A., Massachusetts Institute Technology.
 Woodbury, C. J. H., 125 Milk Street.
 Woods, Fred A., Harvard Medical School.

BROCKTON.

Bagg, Rufus M., Jr., High School.

BROOKLINE.

Channing, Walter.
 Estes, Dana.
 Hedge, Frederic H., 440 Boylston Street.
 Manning, Warren H.
 Olmsted, John Charles, 16 Warren Street.
 Packard, John C., 14 Searle Avenue.

GEOGRAPHICAL DISTRIBUTION—MASS.

CAMBRIDGE.

Abbott, Francis Ellingwood, 43 Larch Road.
 Adams, Comfort A., 13 Farrar Street.
 Allen, Glover Morrill, 68 Perkins Hall.
 Bailey, Solon Irving, Harvard University.
 Benneson, Miss Cora Agnes, 4 Mason Street.
 Black, Newton Henry, 26 Trowbridge Street.
 Blakeslee, Albert Francis, 12 Kirkland Place.
 Bouton, Charles Leonard, Harvard University.
 Bushnell, D. I., Jr., Peabody Museum.
 Castle, W. E., Harvard University.
 Chandler, Seth C., 16 Craigie Street.
 Clark, Austin Hobart, 68 Perkins Hall.
 Cole, Leon Jacob, 41 Wendell Street.
 Davis, Andrew McFarland, 10 Appleton Street.
 Davis, William Morris.
 Dixon, Roland B., Peabody Museum.
 Duval, Edmund P. R., 32 Irving Street.
 Eastman, Charles Rochester, Museum Comparative Zoology.
 Farlow, W. G., 24 Quincy Street.
 Fletcher, Miss Alice C., Peabody Museum.
 Goldthwait, James Walter, Harvard University.
 Goodale, George Lincoln, Botanic Gardens.
 Hall, Edwin H., 5 Avon Street.
 Hammond, Mrs. Eliza F., 1689 Cambridge Street.
 Horseford, Miss Cornelia, 27 Craigie Street.
 Jackson, Charles L., Harvard University.
 Jackson, Robert T., 9 Fayerweather Street.
 James, William, Harvard University.
 Jeffrey, Edward C., 21 Follen Street.
 Kennedy, Frank Lowell, Harvard University.
 Kennelly, Arthur E., Harvard University.
 Livermore, Mrs. M. A. C., 59 Brewster Street.
 Mark, Edward Laurens, Harvard University.
 Mellen, Edwin D., 1590 Massachusetts Avenue.
 Munsterberg, Hugo, Harvard University.
 Newell, William Wells.
 Olive, Edgar W., University Museum.
 Palache, Charles, University Museum.
 Parker, George Howard, Harvard University.
 Pickering, Edward C., Harvard Observatory.
 Putnam, F. W., Peabody Museum.
 Rand, Herbert Wilbur, Harvard University.
 Raymer, George Sharp, Harvard University.
 Richards, Theodore William, Harvard University.

GEOGRAPHICAL DISTRIBUTION—MASS.

Robinson, Benjamin Lincoln, Harvard Herbarium.
Ross, Denman Waldo, 24 Craigie Street.
Sabine, Wallace Clement, 40 Shepard Street.
Sargent, Dudley Allen, Harvard University.
Sargent, Porter E., 105 Lexington Avenue.
Scudder, Samuel H.
Sharples, Philip Price, 22 Concord Avenue.
Smith, Philip Sidney, 54 Concord Avenue.
Smith, Wm. L., 360 Marlborough Street.
Swartzel, Karl D., 6 Kirkland Avenue.
Thaxter, Roland, Harvard University.
Ward, Robert DeC., Harvard University.
Watts, William Lawrence, 56 Henry Street.
White, John Williams, 18 Concord Avenue.
Whiting, S. B., 11 Ware Street.
Willoughby, Charles C., Peabody Museum.
Wilson, Robert W.
Wolff, John E., University Museum.
Woodworth, William McMichael, 149 Brattle Street.
Yerkes, Robert Mearns, Harvard University.

CAMBRIDGEPORT.

Lundin, Carl A. R., care Messrs. Alvan Clark and Sons.

CHARLESTOWN.

Farwell, Robert Benneson, 53 Monument Avenue.

CHELSEA.

Huxley, Henry M., Revere Rubber Co.

COHASSET.

Bigelow, Henry Bryant.

CONCORD.

Smith, Wm. Lincoln.

Wheeler, William.

DEDHAM.

Wolcott, Mrs. Henrietta L. T.

DORCHESTER.

Griswold, Leon Stacy, 238 Boston Street.

Hyams, Miss Isabel F., 26 Wales Street.

Shurtleff, Eugene, 73 Hancock Street.

FALL RIVER.

Jackson, John H., 155 Franklin Street.

GEOGRAPHICAL DISTRIBUTION—MASS.

FITCHBURG.

Kirkpatrick, E. A.

FRANKLIN.

Flanders, Charles S.

GARDNER.

Lemon, James S., 31 Park Street.

GLOUCESTER.

Garland, Jos. E., 17 Pleasant Street.

GREAT BARRINGTON.

Stanley, William.

GROTON.

Griswold, Clifford S., Groton School.

Miller, Miss Louise K., School of Horticulture and Landscape Gardening for Women.

HAMPDEN.

Bliss, Charles B.

HAVERHILL.

Chase, P. Stuart, 53 Summer Street.

Nichols, Austin P., 4 Highland Avenue.

HOLYOKE.

Butts, Edw. P., Am. Writing Paper Co.

Mahoney, Stephen A., 206 Maple Street.

HOPEDALE.

Smith, Miss J. Angelina.

HYANNIS.

Holmes, Frederic Harper, State Normal School.

HYDE PARK.

Perkins, Albert S., 75 Milton Avenue.

Rotch, A. Lawrence, Blue Hill Meteorological Observatory.

JAMAICA PLAIN.

Balch, Francis Noyes, Prince Street.

Bowditch, Miss Charlotte, Pond Street.

Bowditch, H. P.

Dole, Charles Fletcher.

Edes, Robert Thaxter, 15 Greenough Avenue.

Jack, John G.

Kinraid, Thomas Burton, 38 Spring Park Avenue.

Riddle, Lincoln W., Roanoke Avenue.

GEOGRAPHICAL DISTRIBUTION—MASS.

Watson, Benjamin Marston, Bussey Institution.
Wilmarth, Mrs. Henry D., 51 Eliot Street.

LAWRENCE.

Alden, John, Pacific Mills.
King, George B.

LONG MEADOW.

Clark, John E., 34 S. Park Terrace.

LOWELL.

Barker, Mrs. Martha M., 42 11th Street.
Frothingham, Mrs. Frederick, 152 Pawtucket Street.
Page, Dudley L., 46 Merrimack Street.
Page, Mrs. Nellie K., 46 Merrimack Street.
Parker, Moses Greeley, 11 1st Street.

LYNN.

Fish, Walter Clark, King's Beach Terrace.
Watters, William, 26 South Common Street.

MALDEN.

Ayer, James I., 5 Main Street Park.
Lund, James, 142 Hawthorne Street.
Sprague, C. H.
Sullivan, J. A., 308 Main Street.

MANCHESTER.

Rockwell, Alfred P.

MIDDLEBORO.

Jenks, Elisha T.

MILTON.

Field, W. L. W.
Huntington, Ellsworth, Highland Street.
Lesley, J. Peter, P. O. Box 93.
Upton, George B.

MONSON.

Ellis, Frederick W.

MT. HERMON.

Budington, Robert A.

NEW BEDFORD.

Allen, Walter S., 34 South 6th Street.
Brown, Robert Marshall, 35 Eighth Street.

NEWBURYPORT.

Hovey, Horace C., 60 High Street.

NEWTON.

Frisbie, J. F.
Kendrick, Arthur.
Sawyer, Edward.
Stone, Lincoln R.
Warren, S. Edward.

NONQUITT.

Pulsifer, Mrs. C. L. B.
Pulsifer, William H.

NORTH ABINGTON.

Wheatley, Frank W., 47 Adams Street.

NORTH ANDOVER.

Carter, Henry C., Bradford Street.
Kittredge, Miss H. A., 56 Prospect Street.
Watson, Miss C. A., 56 Prospect Street.

NORTH EASTON.

Ames, Oakes.

{ NORTHFIELD.

Hart, Miss Mary E.

NORTHAMPTON.

Ganong, William F., Smith College.
Wilder, Harris H., Smith College.

PITTSFIELD.

Ballard, Harlan H., 50 South Street.
Kelly, John F., 284 West Housatonic Street.

READVILLE.

Kennedy, George Golding.

ROXBURY.

Kennedy, Harris, 284 Warren Street.
Prang, Louis, 45 Centre Street.
Pritchard, Myron T., 125 School Street.

RUTLAND.

Dunham, Henry Bristol, State Sanatorium.

SALEM.

Morse, E. S.
Osgood, Joseph B. F.
Sargent, Ara Nathaniel, 116 Federal Street.

SOMERSET.

Slade, Elisha.

SOUTHBORO.

Gulliver, F. P., St. Marks School.

SOUTH FRAMINGHAM.

McPherson, William D., 58 Hartford Street.

SOUTH HADLEY.

Clapp, Miss Cornelia, Mt. Holyoke College.
Cowles, Miss Louise F., Mt. Holyoke College.
Goldthwaite, Miss Nellie Esther, Mt. Holyoke College.
Hooker, Henrietta E., Mt. Holyoke College.
Keith, Marcia A., Mt. Holyoke College.

SPRINGFIELD.

Baker, A. G.
Balliet, Thomas M.
Booth, Miss Mary A., 60 Dartmouth Street.
Bradley, Milton.
Calkins, Marshall, 14 Maple Street.
Dimmock, George, Box 1597.
Kimball, Albert B., Central High School.
Lewis, George Smith, 746 State Street.
Lyford, Edwin F.
Orr, William, Jr., 30 Firglade Avenue.
Pinney, Mrs. Augusta Robinson, 350 Central Street.
Pollard, Chas. L.
Préfontaine, Louis A., 317 Main Street.
Stebbins, Miss Fannie A., 480 Union Street.
Watson, Frank E., 832 Main Street.

SWAMPSCOTT.

Thomson, Elihu.

TOPSFIELD.

Sears, Henry Francis.

TUFTS COLLEGE.

Chase, Harry Gray.
Dolbear, A. Emerson.
Kingsley, J. Sterling.

WABAN.

Pillsbury, John H., Waban School.

GEOGRAPHICAL DISTRIBUTION—MASS.

WAKEFIELD.

Bailey, E. P., 102 Railroad Street.
Cooke, George Willis, Park Street.

WALTHAM.

Moses, Thomas F., Worcester Lane.
Wood, Miss Elvira, 198 Adams Street.

WATERTOWN.

Wheeler, Horace Leslie.
Whitney, Solon F., Public Library.

WAVERLEY.

Cowles, Edward, McLean Hospital.

WEYMOUTH.

Watson, Thomas A.

WELLESLEY.

Cheney, Mrs. B. P., Sr.
Cooley, Miss Grace E., Wellesley College.
Cummings, Miss Clara E., Wellesley College.
Hallowell, Miss Susan M., Wellesley College.
Hayes, Ellen.
Morse, Albert P.
Whiting, Miss Sarah F., Wellesley College.
Willcox, Miss Mary Alice, Wellesley College.

WEST FALMOUTH.

Swift, Henry D.

WESTFIELD.

Monroe, Will S., State Normal School.
Wilson, Charles B., State Normal School.

WEST NEWTON.

Puffer, William L., 198 Mt. Vernon Street.

WILLIAMSTOWN.

Clarké, Samuel Fessenden, Williams College.
Milham, Willis I., Williams College.
Woodruff, Lorande Loss, Williams College.

WOODS HOLL.

Crowell, A. F.

WORCESTER.

Allen, Charles Metcalf, Polytechnic Institute.
Ball, Miss Helen Augusta, 43 Laurel Street.
Chandler, Clarence A., 12 Westland Street.
Clark, Thomas H., 34 Lancaster Street.

Conant, L. L., Polytechnic Institute.
 Coombs, Zelotes Wood, Polytechnic Institute.
 Engler, Edmund Arthur, Polytechnic Institute.
 Hodge, Frederick H., Clark University.
 Jennings, Walter L., Polytechnic Institute.
 Kingsbury, Albert, Polytechnic Institute.
 Kinnicutt, Leonard P., 77 Elm Street.
 Marble, J. Russel.
 Mendenhall, T. C.
 Pettegrew, David Lyman, P. O. Box 75.
 Sanford, E. C., Clark University.
 Smith, Alton Lincoln, Polytechnic Institute.
 Smith, Harold B., Polytechnic Institute.
 Story, William E., Clark University.
 Thompson, Millett T., Clark University.
 Webster, Arthur Gordon, Clark University.
 Woodward, Samuel B., 58 Pearl Street.

MICHIGAN.

AGRICULTURAL COLLEGE.

Atkins, Martin D.
 Barrows, Walter B.
 Beal, William James.

ALBION.

Barr, Charles Elisha, Albion College.

ALMA.

Notestein, F. N., Alma College.

ANN ARBOR.

Adams, Charles C., University of Michigan.
 Allen, John Robins, University of Michigan.
 Bartlett, George Miller, University of Michigan.
 Beman, Wooster W., 813 East Kingsley Street.
 Bigelow, Samuel L., University of Michigan.
 Carhart, Henry S., University of Michigan.
 Carrow, Flemming, University of Michigan.
 Chute, Horatio N., High School.
 Cooley, Mortimer E., University of Michigan.
 Cushny, Arthur R., University of Michigan.
 Dock, George, 1014 Cornwell Place.
 Freer, Paul C.
 French, Thos., Jr., 114 North Ingalls Street.
 Gomberg, Moses, 1101 East University Avenue.
 Hall, Asaph, Jr., University of Michigan.

GEOGRAPHICAL DISTRIBUTION—MICH.

Haynes, Miss Julia A., 428 Hamilton Place.
Holmes, S. J., University of Michigan.
Huber, G. Carl, University of Michigan.
Johnson, Otis C., 730 Thayer Street.
Leverett, Frank.
Miggett, W. L., University of Michigan.
Newcombe, Frederick Charles, 1021 East University Avenue.
Novy, Frederick G., University of Michigan.
Patterson, George W., Jr., 814 South University Avenue.
Pettee, William H., University of Michigan.
Prescott, Albert B.
Reed, John O., 907 Lincoln Avenue.
Reighard, Jacob, University of Michigan.
Rominger, Carl.
Running, Theodore R., 935 Greenwood Avenue.
Russell, Israel C., University of Michigan.
Schaeberle, J. M., 502 Second Street.
Schlotterbeck, Julius O.
Smith, Arthur W., 1108 East Ann Street.
Spalding, Volney M., University of Michigan.
Ziwet, Alexander, 644 South Ingalls Street.

ATLANTIC MINE.

Stanton, Frank McMillan, Baltic and Central Mining Co.

BATTLE CREEK.

Kellogg, John H.

COLD WATER.

Bennett, Charles W.
Collin, Henry P., 58 Division Street.

DETROIT.

Baldwin, Mrs. G. H., 3 Madison Avenue.
Bixby, W. H., Jones Building.
Blain, Alexander W., Jr., 131 Elmwood Avenue.
Connor, Leartus, 103 Cass Street.
Courtis, Wm. M., 412 Hammond Building.
Cram, Roys J., 26 Hancock Avenue, West.
Davis, George S., P. O. Box 724.
Doty, Paul, 230 Woodward Avenue.
Edgar, Clinton G., 72 Jefferson Avenue.
Ferry, Dexter M., Jr., 1040 Woodward Avenue.
Haskell, Eugene E., Campau Building.
Houghton, E. Mark, 350 Pennsylvania Avenue.
Keep, William J.

GEOGRAPHICAL DISTRIBUTION—MICH.

Leach, Miss Mary F., 74 Pitcher Street.
Lyons, Albert Brown.
Pendleton, Edward Waldo, 900 Union Trust Building.
Phelps, William Joshua, 37 Alexandrine, West.
Searle, Frederick Edwards, Detroit University School.
Shurly, E. L., 32 Adams Avenue, West.
Van Antwerp, Francis J., 26 Harper Avenue.
Wheeler, Eben S., United States Engineer Office.

ESCANABA.

Millar, John M.

GRAND RAPIDS.

Parmelee, H. P., 508 Michigan Trust Building.
Patton, John, 925 Michigan Trust Building.

HARBOR BEACH.

Oldfield, Anthony M.

HOLLAND.

Mast, Samuel O.

HOUGHTON.

Hood, Ozni P., School of Mines.
McNair, Fred. Walter, Michigan College of Mines.
Wright, Fred. Eugene, College of Mines.

KALAMAZOO.

Charlton, Orlando C.
Todd, Albert M.

LANSING.

Lane, Alfred C.

LAKE LINDEN.

White, Charles G.

MANISTEE.

Johnson, Nels.

MARQUETTE.

Downing, Elliott R., Ph.D., Northern State Normal School.
Faught, John B., Northern State Normal School.

MICHIGAMME.

Loveland, Horace Hall.

MIDLAND.

Dow, Herbert H.

MUSKEGON.

Vanderloan, J., 200 South Terrace Street.

NILES.

Blish, W. G.

OLIVET.

Clark, Hubert Lyman, Olivet College.

Osborn, Frederick A., Olivet College.

PORT HURON.

Willson, Mortimer.

SAULT STE. MARIE.

Edmands, Isaac Russell, Supt. Union Carbide Co.

TECUMSEH.

Jenkins, J. F., 48 Chicago Street.

VULCAN.

Kelly, William.

YPSILANTI.

Jefferson, Mark S. W.

Strong, Edwin A., State Normal School.

MINNESOTA.

DULUTH.

Coleman, Clarence.

FARIBAULT.

Rogers, Arthur Curtis, Minn. School for Feeble Minded.

HIBBING.

Kendall, Hugh F.

LE SUEUR.

Tucker, William A.

MANKATO.

Cox, Ulysses O., State Normal School.

MARSHALL.

Renninger, John S.

MINNEAPOLIS.

Berkey, Charles Peter, University of Minnesota.

Bracken, Henry M., 1010 Fourth Street.

Brown, John C., University of Minnesota.

Constant, Frank H., University of Minnesota.

Eddy, H. T., University of Minnesota.

Elftman, Arthur H., 706 Globe Building.

Fanning, John T., Kasota Block.

GEOGRAPHICAL DISTRIBUTION—MINN.

Fellows, Chas. S., 912 Chamber of Commerce.
Flather, John J., University of Minnesota.
Frankforter, George B., University of Minnesota.
Groat, Benjamin Feland, University of Minnesota.
Hall, C. W., University of Minnesota.
Harding, Everhart P., University of Minnesota.
Haynes, Arthur E., University of Minnesota.
Hortvet, Julius, 313 16th Avenue S. E.
Hunter, Chas. H., 13 Syndicate Block.
Jones, Frederick S., University of Minnesota.
Oestlund, Oscar W., State University.
Sardeson, Frederick William, University of Minnesota.
Stewart, J. Clark, 1628 5th Avenue.
Walker, T. B., 803 Hennepin Avenue.
Washburn, Frederick Leonard, University of Minnesota.
Winchell, N. H.
Zeleny, John, University of Minnesota.

MONTEVIDEO.

Moyer, Lycurgus R.

MOORHEAD.

Ballard, C. A.
Chambers, Will Grant, State Normal School.

NORTHFIELD.

Chaney, Lucian W., Carleton College.
Metcalf, Wilmot V., Carleton College.
Tandberg, John P., St. Olaf College.

PRINCETON.

Armitage, Thomas L.

RED WING.

Hewitt, Charles N.

ST. ANTHONY PARK.

Beach, Miss Alice M., Experiment Station.
Bull, Coates P.
Hays, Willet M., Experiment Station.
Hummel, John A., Experiment Station.
Snyder, Harry, Experiment Station.

ST. PAUL.

Greene, Chas. Lyman, 150 Lowry Arcade.
MacLaren, Archibald, 350 St. Peter Street.
Osborn, H. L., Hamline University.
Rogers, John T., Lowry Arcade.

Sneve, Haldor, Lowry Arcade.
Storrs, Lucius S., N. P. Ry. Company.
Taylor, H. Longstreet, 75 Lowry Arcade.
Upham, Warren.

STANTON.

Knapp, G. N.

WINONA.

Beahan, Willard, 220 West 6th Street.
Messenger, James F., State Normal School.

MISSISSIPPI.

AGRICULTURAL COLLEGE.

Herrick, Glenn W.
Robert, J. C., A. and M. College.

BILOXI.

Tracy, Samuel M.

GREENVILLE.

Stone, Alfred H.

UNIVERSITY.

Fulton, Robert B.
Hume, Alfred.
Leathers, W. S.

VICKSBURG.

Marshall, Horace Miller, U. S. Engineer Office.

WASHINGTON.

Stockard, Charles R., Jefferson Military College.

MISSOURI.

CAPE GIRARDEAU.

Albert, Harry Lee, State Normal School.

COLUMBIA.

Calvert, Sidney, University of Missouri.
Connaway, J. W., State University.
Duggar, Benjamin M., University of Missouri.
Eckles, C. H.
Greene, Charles Wilson, University of Missouri.
Kaufmann, Paul, State University.
Meyer, Max, University of Missouri.
Ramsey, Rolla Roy, 1002 Lowrey Street.
Schweitzer, Paul, University of Missouri.
Spalding, Fred'k P., University of Missouri.
Stewart, Oscar M., University of Missouri.

GEOGRAPHICAL DISTRIBUTION—MO.

FULTON.

Campbell, Leslie Lyle, Westminster College.
MacCracken, John H., Westminster College.

KANSAS CITY.

Barnett, Robert C., 3023 East 20th Street.
Harris, Frederick S., P. O. B. 382.
Kent, James Martin, Manual Training High School.
McCurdy, Hansford M., Manual Training High School.
Miller, Armand R., Manual Training High School.
Moore, Stanley H., Manual Training High School.
Morrison, Gilbert B., 2510 Perry Avenue.
Palmer, Walter K., 401 New York Life Building.
Perkins, John Walter, 423 Altman Building.
Weeks, Edwin Ruthven, 3408 Harrison Street.

LANCASTER.

Mitchell, William Francis.

MARSHALL.

Roberts, John M., High School.

MEXICO.

Baskett, James Newton.

MOUNTAIN GROVE.

Lynch, William H., Mountain Grove School.

PARKVILLE.

Findlay, Merlin C., Park College.
Mattoon, A. M., Scott Observatory of Park College.

ROLLA.

Buckley, Ernest Robertson.
McRae, Austin Lee.

ST. JOSEPH.

Owen, Miss Juliette A., 306 North 9th Street.
Owen, Miss Luella Agnes, 306 North 9th Street.
Owen, Miss Mary Alicia, 306 North 9th Street.

ST. LOUIS.

Barck, Carl, 2715 Locust Street.
Bernays, Augustus Charles, 3623 Laclede Avenue.
Broome, G. Wiley, Mo. Trust Building.
Casey, Thos. L., P. O. Drawer 71.
Chauvenet, William M., 620 Chestnut Street.
Comstock, T. Griswold, 3401 Washington Avenue.
Coulter, Samuel M., The Shaw School of Botany.

GEOGRAPHICAL DISTRIBUTION—MO.

Crunden, Fredk. M., 3635 Laclede Avenue.
 Drayer, H. C., Washington University.
 Evers, Edward, 1861 North Market Street.
 Fischel, Washington E., 2647 Washington Avenue.
 Hambach, G., 1319 Lami Street.
 Harris, James Arthur, Shaw School of Botany.
 Hedgcock, George G., Missouri Botanical Garden.
 Higdon, John Clark, 605 Union Trust Building.
 Hinrichs, Gustavus, 4106 Shenandoah Avenue.
 Hughes, Charles H., 3857 Olive Street.
 Hulbert, C. E., Louisiana Purchase Exposition.
 Johnson, Albert L., 606 Century Building.
 Kinner, Hugo, 1103 Rutger Street.
 Klie, G. H. Charles, 5100 North Broadway.
 Kolbenheyer, Fred'k, 2006 Lafayette Avenue.
 Langsdorf, Alexander Suss, Washington University.
 Lare, H. S. P., 3452 Park Avenue.
 Lemp, William J., Corner Cherokee and 2d Carondelet Avenue.
 Link, Theodore C., Carleton Building.
 McGee, W J, Louisiana Purchase Exposition.
 Mallinckrodt, Edwin, P. O. Sub-station A.
 Markham, George D., 4961 Berlin Avenue.
 Marsden, Samuel, 1015 North Leffengwell Avenue.
 Matlack, Ellwood V., 421 Olive Street.
 Moore, Philip North, 120 Laclede Building.
 Moore, Robert, 61 Vandeventer Place.
 Mulford, Miss A. Isabel, Central High School.
 Nipher, Francis E., Washington University.
 Peterson, C. A., 715 Century Building.
 Prather, John McC., St. Louis High School.
 Randall, John E., 4960 Lotus Avenue.
 Riley, Mrs. Matilda E., Board of Education Building.
 Rogers, Howard J., Universal Exposition.
 Sander, Enno.
 Saunders, Edward W., 3003 Lafayette Avenue.
 Schwab, Sidney I., 4393 Westminster Place.
 Spaulding, Perley, Missouri Botanical Garden.
 Spiegelhalter, Joseph, 2166 Lafayette Avenue.
 Sprague, C. C., 1900 Locust Street.
 Steer, Justin, Washington University.
 Swope, Gerard, 810 Spruce Street.
 Taussig, Albert E., 2647 Washington Avenue.
 Taussig, James, Rialto Building.
 Trelease, William, Missouri Botanical Gardens.
 Vallé, Jules F., 3303 Washington Avenue.
 Van Ornum, John Lane, Washington University.

Von Schrenk, H., Missouri Botanical Garden.
Whelpley, H. M., 222 South Broadway.
Woodward, Calvin M., Washington University.

SPRINGFIELD.

Britton, Wiley, Bureau of Pensions.
Fuller, Homer T., Drury College.

TRENTON.

Summers, Joseph, High School.

WARRENSBURG.

Seawell, Benjamin Lee, State Normal School.

WARRENTON.

Frick, John H., Central Wesleyan College.

MONTANA.

BOZEMAN.

Blankinship, Jos. W., State College.
Cooley, Robert A., Agricultural College.
Tallman, William Duane, Agricultural College.

BUTTE.

Bowman, Charles Henry, State School of Mines.
Page, Clarence V.
Winchell, Alex. N. V.
Winchell, Horace.

DILLON.

Monroe, Joseph E., State Normal School.

LEWISTOWN.

Silloway, Perley M., High School.

MARYSVILLE.

Byrnes, Owen, P. O. Box 131.
Malm, John L.

MISSOULA.

Elrod, Morton J., University of Montana.
Mills, William Park.
Rowe, Jesse Perry, University of Montana.

NEBRASKA.

ASHLAND.

von Mansfelde, Alexander S., "Quality Hill."

BELLEVUE.

Tyler, Ansel Augustus, Bellevue College.

GEOGRAPHICAL DISTRIBUTION—NEB.

COLUMBUS.

Kern, Walter McCullough.

CREIGHTON.

Burrell, Ramón Haddock.

GERING.

Snyder, Nathaniel Marion.

HEBRON.

Wilson, Andrew G.

HOWARD.

Warren, George F., Jr.

LINCOLN.

Almy, John E., University of Nebraska.
Barbour, Erwin Hinckley, University of Nebraska.
Bessey, Charles Edwin, University of Nebraska.
Bolton, Thaddeus L., University of Nebraska.
Brace, D. B., University of Nebraska.
Bruner, Lawrence, University of Nebraska.
Clark, Herbert A., 346 North 17th Street.
Clements, Frederic E., University of Nebraska.
Cutter, Irving S., Box 732.
Gordon, Charles Henry, University of Nebraska.
Heck, Charles McGee, 1507 R Street.
Moore, Burton E., University of Nebraska.
Skinner, Clarence A., University of Nebraska.
Stevens, James Franklin, 1136 O Street.
Swezey, Goodwin D., University of Nebraska.
Ward, Henry B., University of Nebraska.

MINDEN.

Hopeman, H.

NORTH PLATTE.

Fort, I. A.

OMAHA.

Cleburne, Wm., 1219 South Sixth Street.
Foote, James S., 422 South 26th Street.
Gifford, Harold, 405 Kasbach Block.

PERU.

Clark, W. A., State Normal School.
Duncanson, Henry Bruce, State Normal School.

PLAINVIEW.

Peterson, Niels Frederick.

RED CLOUD.

Bates, John Mallery.

UNIVERSITY PLACE.

Bell, A. T.

WAHOO.

Bush, John C. F.

NEVADA.

RENO.

Louderback, George D., State University.

TYBO.

Redding, Allen C.

NEW HAMPSHIRE.

ANDOVER.

Eastman, J. R.

CENTER SANDWICH.

White, Charles H.

CONCORD.

Coit, J. Milner, Saint Paul's School.

Coit, Joseph Howland, Saint Paul's School.

Douglas, Orlando B., 20 Pleasant Street.

Sears, Frederick Edmund, Saint Paul's School.

Walker, Charles R.

Watson, Irving A., State Board of Health.

DOVER.

Brown, Elisha R., 50 Silver Street.

Fish, Charles Henry, Cocheco Mfg. Co.

DURHAM.

Morse, Fred. W., New Hampshire College.

Parsons, Charles Lathrop.

Pettee, Charles Holmes.

Rane, Frank William, Agricultural Experiment Station.

Weed, Clarence M.

HANOVER.

Bartlett, Edwin J., Dartmouth College.

Emerson, C. F., Box 499.

Fletcher, Robert, Thayer School of Civil Engineering.

Gilbert, Norman E., Dartmouth College.

Hitchcock, Charles H.
Hull, Gordon Ferrie, Dartmouth College.
Poor, John Merrill, Dartmouth College.
Richardson, Charles Henry, Dartmouth College.
Richardson, Leon B., Dartmouth College.
Smith, William T., Dartmouth Medical School.

MANCHESTER.

Blair, Mrs. Eliza N.
Bossi, Arnold L., 1962 Elm Street.
Clough, Albert L., Box 114.
Manning, Charles H.
Schaeffer, Henri N. F., P. O. Box 676.

NEWPORT.

Bradley, Arthur C.

PENACOOK.

Hoyt, Adrian Hazen.

PORTSMOUTH.

Winterhalter, A. G., Navy Yard.

NEW JERSEY.

AMPERE.

Dunn, Gano S.
Wheeler, Schuyler Skaats.

BAYONNE.

Wadman, W. E., 102 Lord Avenue.

BELVIDERE.

Cummins, George Wyckoff.

BERNARDSVILLE.

Squibb, Charles F.

BLOOMFIELD.

Chancellor, William E., 343 Belleville Avenue.
Cornelison, Robert W.

CHATHAM.

Allen, Richard H.

CRAWFORD.

Sackett, Miss Eliza D.

EAST ORANGE.

Colie, Edward M.
Mann, Albert, 18 Summit Street.
Miller, Fred. J., 34 Beech Street.

GEOGRAPHICAL DISTRIBUTION—N. J.

ELIZABETH.

Colburn, Richard T.
Collingwood, Francis.
Granbery, Julian Hastings, 561 Walnut Street.
Heyer, William D., 523 South Broad Street.
Langenbeck, Karl.
Miller, Herbert Stanley, 1025 East Jersey Street.
Peck, George, 926 North Broad Street.

FAR HILLS.

Tainter, Frank Stone.

GLEN RIDGE.

Scheffler, Frederick A., Box 233.

GLOUCESTER CITY.

Reiderer, Emil Justus, care Welsbach Light Co.

HACKENSACK.

Krause, Otto H., Prospect Avenue.

HASKELL.

Baker, Theodore, Box 44.

HOBOKEN.

Bristol, William H., Stevens Institute.
Ganz, Albert Frederick, Stevens Institute.
Jacobus, David S., Stevens Institute.
Martin, Louis Adolphe, Jr., Stevens' Institute.
Shultz, Charles S.
Smith, Eugene, 317 Washington Street.
Webb, J. Burkitt, Stevens Institute.

JERSEY CITY.

Dickinson, Gordon K., 278 Montgomery Street.
Fleming, Dudley D., 249 Washington Street.
Gordon, Leonard, Free Public Library.
Hungerford, W. S., care W. Ames & Company.
McLaughlin, George Eyerman, 41 Crescent Avenue.
Stearns, T. C., 44 Montgomery Street.
Walker, John M., 260 Montgomery Street.

LITTLE FALLS.

McCormick, Henry D.

LOCUST.

Washington, Henry S.

MADISON.

Toothe, William.

MAPLEWOOD.

Riker, Clarence B.

MILLVILLE.

Barton, G. E., 212 North 3d Street.

Wade, John W., 318 North 2d Street.

MONTCLAIR.

Le Brun, Mrs. Michel M., 8 Mountain Avenue.

Parker, Horatio N., 456 Bloomfield Avenue.

MORRIS PLAINS.

Evans, Britton D., State Hospital.

MORRISTOWN.

Colgate, Abner W.

Hoffman, Samuel V.

McClintock, Emory.

Waller, E., 7 Franklin Place.

NEWARK.

Baldwin, Herbert B., 9-11 Franklin Street.

Colby, Edward A., care Baker Platinum Works.

Disbrow, Wm. S., 151 Orchard Street.

Edwards, Arthur M., 333 Belleville Avenue.

Howell, John W., Ballantine Parkway.

Luther, Miss Agnes Vinton, 917 Broad Street.

Murdock, George J., 248 6th Avenue.

Pomeroy, Charles Taylor, 55 Broad Street.

Rockwood, Charles G., 70 South 11th Street.

Sharp, Clayton H., 722 Highland Avenue.

Weston, Edward, 645 High Street.

NEW BRUNSWICK.

Bowser, E. A., Rutgers College.

Brackett, Byron B., Rutgers College.

Halsted, Byron D., Rutgers College.

Kelsey, James A., Agricultural Experiment Station.

Prentiss, Robert W., Rutgers College.

Smith, John B., Rutgers College.

Speyers, Clarence Livingston, Rutgers College.

Van Dyck, Francis Cuyler, Rutgers College.

NUTLEY.

Clements, Joseph.

OCEAN GROVE.

Reifsnyder, Samuel K., 73 Embury Avenue.

GEOGRAPHICAL DISTRIBUTION—N. J.

ORANGE.

Vanderpoel, Frank, 153 Center Street.

PASSAIC.

Berry, Edward W., News Building.

PATERSON.

Nelson, William, Paterson National Bank.

PERTH AMBOY.

Roessler, Franz, 39 High Street.

PLAINFIELD.

Probasco, John Buck, 175 East Front Street.

Waldo, Leonard, 640 West 8th Street.

PRINCETON.

Baldwin, J. Mark, Princeton University.

Brackett, C. F., Princeton University.

Dahlgren, Ulric, Princeton University.

Farr, Marcus S., Princeton University.

Libbey, William, Princeton University.

Lovett, Edgar Odell, Princeton University.

Macloskie, George, Princeton University.

Magie, William Francis, Princeton University.

Rankin, Walter M., Princeton University.

Rockwood, Charles G., Jr., Princeton University.

Smith, Herbert S. S., Princeton University.

Warren, Howard C., Princeton University.

Willson, Frederick N., Princeton University.

Woodhull, Alfred A., 46 Bayard Lane.

Young, C. A., Princeton University.

SHORT HILLS.

Morgan, William F.

SOUTH ORANGE.

Delany, Patrick B.

SUMMIT.

Bassett, Carroll P.

Herr, Hiero B.

Thompson, Miss Anna F., P. O. Box 32.

TRENTON.

Smock, John Conover.

WEEHAWKEN.

Warden, Albert W., 325 Fulton Street.

GEOGRAPHICAL DISTRIBUTION—N. J.—N. Y.

WESTFIELD.

Clark, Alexander S.

NEW MEXICO.

ALBUQUERQUE.

Grove, G. W., Gold Avenue.

Magnusson, Carl Edward, University of New Mexico.

Tight, William G.

Weinzirl, John.

BLAND.

Rice, John Ainsworth.

EAST LAS VEGAS.

Hewett, Edgar L., New Mexico Normal University.

STEEPLE ROCK.

Robinson, Sanford.

NEW YORK.

ADDISON.

Ainsworth, Herman R.

ALBANY.

Clarke, John Mason, State Hall.

Colvin, Verplanck, State Adirondack Survey.

Felt, Ephraim Porter, Capitol.

Gager, C. Stuart, State Normal College.

Greenalch, Wallace, 54 North Pine Avenue.

Hindshaw, Henry H., State Museum.

Merrill, Frederick J. H., State Museum.

Merrill, Mrs. Winifred Ednerton, 268 State Street.

Paulmier, Frederick Clark, State Museum.

Peck, Charles H.

Pettis, Clifford R., care Forest, Fish and Game Commission.

Pollock, Horatio M., State Civil Service Commission.

Pruyn, John V. L., Jr.

Roy, Arthur J., Dubley Observatory.

Ruedemann, Rudolf, 161 Yates Street.

Theisen, Clement F., 172 Washington Avenue.

Tucker, Willis G., Albany Medical College.

Williams, Mrs. C. P., 284 State Street.

AURORA.

Freley, Jasper Warren, Wells College.

Gregory, Miss Emily R., Wells College.

BATAVIA.

Alexander, Charles Anderson, 10 Vine Street.

BAYPORT.

Post, Charles A.

BEDFORD.

Marble, Manton.

BROCKPORT.

Lennon, William H.

BROOKLYN.

Abraham, Abraham.

Amond, Thomas R., 83-85 Washington Street.

Bartley, Elias H., 21 Lafayette Avenue.

Benjamin, Raphael, Hotel St. George.

Benson, Frank Sherman, 214 Columbia Heights.

Bierwirth, Julius C., 137 Montague Street.

Booraem, J. V. V., 204 Lincoln Place.

Bradley, M. J., 373 Fulton Street.

Brundage, Albert H., 1073 Bushwick Avenue.

Bunker, Henry A., 158 6th Avenue.

Clark, Oliver Durfee, 590 Halsey Street.

Cook, Charles D., 162 Remsen Street.

Culin, Stewart, Brooklyn Institute.

Deghuée, Joseph A., 247 Harrison Street.

Eilers, Anton F., 751 St. Marks Avenue.

Germann, George B., 90 Norman Avenue.

Goldschmidt, S. A., 43 Sedgwick Street.

Goodyear, William H., Museum Brooklyn Institute of Arts and Sciences.

Graef, Edward L., 58 Court Street.

Grimm, Carl Robert, 1622 Caton Avenue, Flatbush.

Grout, Abel J., Boys' High School.

Gulick, Luther H., Pratt Institute.

Hale, Albert C., 352A Hancock Street.

Hale, William H., 40 1st Place.

Hall, James P., 6 Poplar Street.

Hancock, James Cole, 43 Cambridge Place.

Harris, Mrs. Carolyn W., 125 St. Marks Avenue.

Henderson, Joseph J., 689 10th Street.

Henry, Charles C., 56 Clark Street.

Hooker, Davenport, 341 Adelphi Street.

Hooper, Franklin W., Brooklyn Institute.

Hutchinson, Susan A., Brooklyn Institute Museum.

Law, Benedict W., 693 Lafayette Avenue.

Lloyd, Thomas Mortimer, 125 Pierrepont Street.

Low, A. A., Columbia Heights.

GEOGRAPHICAL DISTRIBUTION—N. Y.

McKay, John S., Pasker Collegiate Institute.
 Machalske, F. J., P. O. Box 25, Station W.
 Mangan, Daniel C., 92 Park Avenue.
 Marston, Edwin S., 291 Clinton Avenue.
 Martin, Daniel S., 126 Macon Street.
 Mason, Lewis D., 171 Joralemon Street.
 Mayer, Alfred Goldsborough, Museum Brooklyn Institute.
 Mayo, Caswell A., 1536 15th Street.
 Miller, P. Schuyler, Mt. Prospect Laboratory, Flatbush Avenue.
 Nichols, O. F., 42 Gates Avenue.
 Parker, Herschel C., 21 Fort Green Place.
 Parkhurst, Henry M., 173 Gates Avenue.
 Peabody, George Foster, 28 Monroe Place.
 Perry, Arthur C., 226 Halsey Street.
 Peters, Clayton A., Polytechnic Preparatory School, 13th Avenue
 and 56th Street.
 Pierrepont, Henry E., 216 Columbia Heights.
 Pitts, Thomas Dorsey, 90 Halsey Street.
 Redfield, William C., Borough Hall.
 Rothe, William G., 226 Stuyvesant Avenue.
 Ruland, M. A., 53 Linden Avenue.
 Schlichting, Emil, 61 Hicks Street.
 Schoonhoven, John J., 34 Second Place.
 Serviss, Garrett P., 8 Middagh Street.
 Sheldon, Samuel, Polytechnic Institute.
 Smith, Mrs. Annie Morrill, 78 Orange Street.
 Squibb, Edward Hamilton, 148 Columbia Heights.
 Tibbals, Geo. A., 148 Milton Street.
 Velsor, Joseph A., 105 McDonough Street.
 von Nardroff, Ernest R., 397 Madison Street.
 Warner, James D., 463 East 26th Street, Flatbush.
 Williston, Arthur L., Pratt Institute.
 Wills, Joseph Lainson, 133 Midwood Street.
 Wright, Jonathan, 73 Remsen Street.
 Wunderlich, Frederick W., 165 Remsen Street.

BUFFALO.

Barrows, Franklin W., 45 Park Street.
 Bradley, Charles W., 1064 Ellicott Square.
 Busch, Frederick Carl, 145 Allen Street.
 Cary, Mrs. Elizabeth M. L., 184 Delaware Avenue.
 Fleming, Miss Mary A., The Oxford, 432 Pearl Street.
 Glenny, William H.
 Houghton, Frederick, Public School, No. 7.
 Letson, Miss Elizabeth J., 366 Massachusetts Avenue.

GEOGRAPHICAL DISTRIBUTION—N. Y.

Mixer, Fred. K., 546 Delaware Avenue.
Offinger, Martin H., Buffalo Commercial and Electro-Mech. Inst.
Park, Dr. Roswell, 510 Delaware Avenue.
Pohlman, Dr. Julius, 404 Franklin Street.
Porter, Miss Edna, 94 Russell Avenue.
Rochester, Delancey, 469 Franklin Street.
Smith, Lee H., 663 Main Street.
Smith, T. Guilford.
Sowers, David Wood, 179 North Pearl Street.
Sperry, Elmer A., 366-388 Massachusetts Avenue.
Starr, Elmer G., 523 Delaware Avenue.
Stockton, Charles G., 436 Franklin Street.
Vogt, Frederick A., Central High School.

CANANDAIGUA.

Richardson, Charles A.

CATSKILL.

Van Orden, Charles H.

CHERRY VALLEY.

Cox, Abraham Beekman.

CLINTON.

Saunders, A. P., Hamilton College.

Smyth, C. H., Jr.

COLLEGE POINT.

Hartz, J. D. Aug.

CORTLAND.

Higgins, F. W., 20 Court Street.

CROTON-ON-HUDSON.

Goldsborough, John Byron.

ELMA.

Bancroft, Alonzo C.

ELMIRA.

Wolverton, Byron C., P. O. Box 43.

FLORAL PARK.

Allen, C. L.

FLUSHING.

Clark, Edmund, 426 Sanford Avenue.

Ward, Delancey W., 163 Madison Avenue.

GARRISON-ON-HUDSON.

Cheesman, T. M.

Thompson, Walter.

GENESEO.

Wadsworth, William A.

GEOGRAPHICAL DISTRIBUTION—N. Y.

GENEVA.

Beach, Spencer Ambrose, Experiment Station.
Brooks, William R., Smith Observatory.
Durfee, William P., 639 Main Street.
Harding, Harry A., Experiment Station.
Jordan, Whitman H., Experiment Station.
Stewart, Fred. Carlton, Experiment Station.
Van Slyke, Lucius L., Experiment Station.

GOUVERNEUR.

Anthony, Mrs. Emilia C.

GREENE.

Williams, Frank H.

GREENWICH.

Sharpe, Benjamin F.

HAMILTON.

Brigham, Albert Perry, Colgate University.
Chester, Wayland Morgan, Colgate University.
Child, Clement D., Colgate University.
McGregory, J. F., Colgate University.
Taylor, James M.

HASTINGS-ON-HUDSON.

Chrystie, William F.

HIGHLAND FALLS.

Pell, Mrs. Alfred.

IRVINGTON-ON-HUDSON.

Schuyler, Philip.

ITHACA.

Allen, Frank, Cornell University.
Atkinson, George F., Cornell University.
Bancroft, Wilder Dwight, Cornell University.
Bedell, Frederick, Cornell University.
Blaker, Ernest, Cornell University.
Caldwell, George C., Cornell University.
Clark, Judson F., 402 Eddy Street.
Craig, John, Cornell University.
Dennis, Louis Munroe, Cornell University.
Durand, Elias J., 402 Eddy Street.
Durand, W. F., Cornell University.
Fernow, Bernhard E., Cornell University.
Fish, Pierre A.
Foxworthy, Fred. W., Cornell University.
Gage, Simon Henry, Cornell University.

GEOGRAPHICAL DISTRIBUTION—N. Y.

Gage, Mrs. Susanna Phelps.
Gifford, John Clayton, State College of Forestry.
Gill, Adam Capen, Cornell University.
Hoobler, Bert R., Cornell University.
Hopkins, Grant S., Cornell University.
Jacoby, Henry S., Cornell University.
Kerr, Abram T., Cornell University.
Kingsbury, Benjamin F., Cornell University.
Lauman, George Nieman, Cornell University.
McCaustland, Elmer J., Cornell University.
McMahon, James, Cornell University.
Mann, Paul B., 45 East Avenue.
Merritt, Ernest, Cornell University.
Moler, George S., 106 University Avenue.
Nichols, E. L., Cornell University.
Ries, Heinrich.
Rowlee, W. W., Cornell University.
Ryan, Harris J., Cornell University.
Schurman, J. G., Cornell University.
Shearer, John Sanford, Cornell University.
Slingerland, Mark Vernon, Cornell University.
Tanner, John Henry, 7 Central Street.
Tarr, Ralph Stockman, Cornell University.
Thom, Charles, 239 Hazen Street.
Townsend, Anna B, 214 Hazen Street.
Titchener, E. B., Cornell University.
Wiegand, Karl McKay, Cornell University.
Wilder, Burt Green, Cornell University.
Willcox, Walter F., Cornell University.

JAMAICA.

Sirrinc, F. Atwood, 110 New York Avenue.

KENWOOD.

Noyes, Theodore A.

KINGSTON-ON-HUDSON.

Gage-Day, Mary, 207 Wall Street.

LARCHMONT.

Neilson, John.

LONG ISLAND CITY.

Richardson, Clifford, Barber Asphalt Paving Company.

LOWVILLE.

Stephens, W. Hudson.

MIDDLETOWN.

Wilbur, A. B.

MOHEGAN.

Kunz, George H.

MOUNT VERNON.

Blackmore, Henry S., 206 South 9th Avenue.

Davis, Abial B., 129 East Lincoln Avenue.

Youmans, Vincent J., 175 Elm Place.

NEW BRIGHTON.

Ransome, Ernest Leslie, Westervelt and 4th Avenues.

NEWBURGH.

Allan, Charles F.

Crane, James M.

Doughty, John W., 165 Johnston Street.

Esmond, Darwin W.

Foster, William.

Gleason, W. Stanton, 143 Grand Street.

Gordon, Reginald.

Gouldy, Miss Jennie A.

Hirschberg, Michael H.

Leslie, Miss Augusta.

Lockwood, Cornelius Wygant.

Macdonald, Benjamin J., 296 Grand Street.

Mitchell, James.

Robinson, Charles Dwight.

Weed, J. N., 244 Grand Street.

Weygant, Charles H.

Wilkinson, John G.

Williams, Charles S., 166 Montgomery Street.

NEW HARTFORD.

Scripture, Arthur M.

NEW ROCHELLE.

Pryer, Charles.

NEW YORK.

Abbe, Robert, 13 West 50th Street.

Adams, Edward Dean, 35 Wall Street.

Adams, Ernest Kempton, 455 Madison Avenue.

Adler, Isaac, 12 East 60th Street.

Adriance, John S., 105 East 39th Street.

Alexander, Harry, 18 and 20 West 34th Street

Allison, Hendery, 260 West 57th Street.

Alpers, William C., 45 West 31st Street.

- Amundson, John A., 146 Broadway.
 Anderson, A. J. C., 127 Water Street.
 Anthony, Richard A., 122-124 Fifth Avenue.
 Anthony, William A., Cooper Union.
 Archer, George F., 31 Burling Slip.
 Arnold, Mrs. Francis B., 101 West 78th Street.
 Aspinwall, John, 290 Broadway.
 Auchincloss, William S., 36 West 12th Street.
 Austen, Peter T., 80 Broad Street.
 Avery, Samuel P., 4 East 38th Street.
 Bair, Joseph Hershey, Columbia University.
 Baker, Frederic, 815 Fifth Avenue.
 Balch, Samuel W., 67 Wall Street.
 Bangs, Lemuel Bolton, 39 East 72d Street.
 Banks, William C., 439 East 144th Street.
 Barber, Amzi L., 7 East 42d Street.
 Barbour, Thomas, 50 White Street.
 Barnes, Edward W., Box 446.
 Beck, Carl, 37 East 31st Street.
 Beekman, Gerard, 47 Cedar Street.
 Beers, M. H., 410 Broadway.
 Bell, C. M., 320 Fifth Avenue.
 Belmont, August, 23 Nassau Street.
 Benedict, James H., 14 East 70th Street.
 Benham, J. W., 26 West 23d Street.
 Bennett, Henry C., 4th Flat, 1692 Broadway.
 Bernheimer, Charles L., 43 East 63d Street.
 Bickmore, Albert S., American Museum Natural History.
 Bien, Julius, 140 6th Avenue.
 Bigelow, Maurice A., Columbia University.
 Biggs, Charles, 13 Astor Place.
 Billings, Miss E., 279 Madison Avenue.
 Bishop, Heber R., Mills Building.
 Blake, Joseph A., 601 Madison Avenue.
 Blakeman, Mrs. Birdseye, 9 East 44th Street.
 Bliss, Cornelius N., 117 Duane Street.
 Bloodgood, John H., 6 West 40th Street.
 Boas, Emil L., 37 Broadway.
 Boas, Franz, American Museum Natural History.
 Bogert, Marston Taylor, Columbia University.
 Bookman, Samuel, 9 East 62d Street.
 Bowker, R. R., 28 Elm Street.
 Bradley, Charles S., 44 Broad Street.
 Bramwell, George W., 335 Broadway.
 Bristol, John I. D., Metropolitan Building.

GEOGRAPHICAL DISTRIBUTION—N. Y.

Britton, N. L., Bronx Park.
 Bronson, E. B., 10 West 34th Street.
 Brown, Joseph Stanford, 489 Fifth Avenue.
 Brown, W. L., 42 West 72d Street.
 Brownell, Silas B., 71 Wall Street.
 Bruggerhof, F. W., 36 Cortlandt Street.
 Bryan, Walter, 42 East 28th Street.
 Buchholz, Carl W., 21 Cortlandt Street.
 Buckingham, Chas. L., 38 Park Row.
 Bumpus, H. C., American Museum Natural History.
 Burchard, Anson W., 44 Broad Street.
 Burgess, Edward S., 11 West 88th Street.
 Burr, William H., Columbia University.
 Burton-Opitz, Russell, Columbia University.
 Calder, George, 105 East 22d Street.
 Calkins, G. N., Columbia University.
 Cammann, Hermann H., 51 Liberty Street.
 Carss, Miss Elizabeth, Teachers' College.
 Carter, James C., 277 Lexington Avenue.
 Carter, Marion H., 504 West 143d Street.
 Caswell, W. H., 201 West 55th Street.
 Cathcart, Miss J. R., The Barnard.
 Catt, Geo. W., Park Row Building.
 Cattell, James McKeen, Columbia University.
 Chamberlin, W. E., 111 Water Street.
 Chambers, Frank R., 842 Broadway.
 Chandler, C. F., Columbia University.
 Childs, James E., 300 West 93d Street.
 Chisholm, Hugh J., 813 Fifth Avenue.
 Chisolm, George E., 19 Liberty Street.
 Church, E. D., Jr., 63 Wall Street.
 Churchill, Wm. W., 26 Cortlandt Street.
 Churchward, Alexander, 44 Broad Street.
 Clark, Ernest P., 58th Street.
 Clark, William Brewster, 50 East 31st Street.
 Cochran, W. Bourke, 31 Nassau Street.
 Coffin, C. A., 44 Broad Street.
 Cole, George Watson, Graham Court, 1925 7th Avenue.
 Conant, Charles A., 38 Nassau Street.
 Conant, Miss E. Ida, 42 West 48th Street.
 Copper, Edward, 12 Washington Square, North.
 Corthell, Elmer L., 1 Nassau Street.
 Cox, Charles F., Grand Central Depot.
 Cox, Edmund O., 1878 Seventh Avenue.
 Crampton, Henry E., Columbia University.

Crocker, Francis B., Columbia University.
 Crosby, William Edward, 1603 Amsterdam Avenue.
 Curtis, Carlton C., Columbia University.
 Curtis, Charles B., 9 East 54th Street.
 Curtis, G. Lenox, 7 West 58th Street.
 Curtis, H. Holbrook, 118 Madison Avenue.
 Cutler, Colman Ward, 36 East 33d Street.
 Cutter, Ephraim, 120 Broadway.
 Dana, Charles L., 50 West 46th Street.
 Davies, William G., 22 East 45th Street.
 Davis, Bergen, Columbia University.
 Davis, William Harper, Columbia University.
 Day, William Scofield, 337 West 87th Street.
 de Coppet, Henry, 22 West 17th Street.
 de Forest, Robert W., 30 Broad Street.
 De Garmo, Wm. B., 56 West 36th Street.
 Deimel, Richard F., 209 West 97th Street.
 Delafield, Maturin L., Jr., Fieldston, Riverdale.
 Dellenbaugh, Frederick S., Century Club.
 Dennett, William S., 8 East 49th Street.
 de Raasloff, Harold, 18 Burling Slip.
 Devereux, W. B., 99 John Street.
 Dickerson, E. N., 141 Broadway.
 Dimock, Mrs. Henry F., 25 East 60th Street.
 Dodge, D. Stuart, 225 Madison Avenue.
 Dodge, Philip T., Tribune Building.
 Dodge, Richard E., Columbia University.
 Dodman, Alfred C., Jr., 235 West 108th Street.
 Doherty, Henry L., 40 Wall Street.
 Douglas, James, 99 John Street.
 Draper, Daniel, New York Meteorological Observatory.
 Draper, Mrs. Henry, 271 Madison Avenue.
 Dreyfus, William, 162 East 95th Street.
 Drummond, Isaac Wyman, 436 West 22d Street.
 Dunham, Edward K., 338 East 26th Street.
 Durand, John S., 146 Broadway.
 Dwight, Jonathan, Jr., 2 East 34th Street.
 Earle, F. S., Bronx Park.
 Earll, Charles I., 76 William Street.
 Easton, Christopher, Metropolitan Hospital, Blackwells Island.
 Eimer, August, 220 East 19th Street.
 Elliott, George T., Cornell Medical College.
 Ely, Robert Erskine, 23 West 44th Street.
 Eno, A. F., 32 Fifth Avenue.
 Eno, John Chester, Waldorf-Astoria Hotel.

GEOGRAPHICAL DISTRIBUTION—N. Y.

Faile, Thomas H., Murray Hill Hotel.
 Fairchild, B. T., P. O. Box 1120.
 Falding, Frederic J., 52 Broadway.
 Falk, Gustav, 24 East 81st Street.
 Farrand, Livingston H., Columbia University.
 Farwell, Elmer S., 507 West 142d Street.
 Fay, L. G., 20 Exchange Place.
 Ferguson, L. L., 155 Broadway.
 Fernald, F. A., Broadway and 117th Street.
 Fisher, George E., 37 and 39 Wall Street.
 Fiske, Thomas S., Columbia University.
 Fletcher, Andrew, 339 West 77th Street.
 Flint, Austin, Cornell University Medical College.
 Ford, James B., 507 Fifth Avenue.
 Foster, Macomb G., P. O. Box 1120.
 Fox, William, College of the City of New York.
 Fraenkel, Joseph, 46 East 75th Street.
 Frankland, Frederick W., 346 Broadway.
 Freeborn, George C., 215 West 70th Street.
 Fries, Harold H., 92 Reade Street.
 Frissell, H. S., 5th Avenue and 44th Street.
 Frost, George H., 220 Broadway.
 Fuller, George W., 170 Broadway.
 Furst, Clyde, Columbia University.
 Gahagan, William L., 141 Broadway.
 Gardner, George Clinton, 416 Beach Street, North.
 Garver, John A., 44 Wall Street.
 Geisler, Joseph F., New York Mercantile Exchange.
 Gibson, George H., 476 West 141st Street.
 Gies, William J., College of Physicians and Surgeons.
 Godkin, Mrs. E. L., 36 West 10th Street.
 Goodnow, Henry R., 95 Riverside Drive.
 Graham, R. D., 281 Fourth Avenue.
 Gratacap, L. P., 77th Street and 8th Avenue.
 Greeff, Ernest F., 37 West 88th Street.
 Green, Horace, 15 Spruce Street.
 Greenough, John, 31 West 35th Street.
 Griffin, Eugene, 44 Broad Street.
 Grinnell, George Bird, 346 Broadway.
 Grosvenor, Edwin P., 414 West 118th Street.
 Groszmann, M. P. E., "Pinehurst," Depot Lane, Wash'n Heights.
 Gruenberg, Benjamin C., 60 West 13th Street.
 Hagar, Stansbury, 48 Wall Street.
 Hague, James D., 18 Wall Street.
 Hallock, Albert P., 440 1st Avenue.

- Hallock, William, Columbia University.
 Hammer, William Joseph, 1406 Havemeyer Building.
 Hammond, Mrs. John Hays, 32 Riverside Drive.
 Haslacher, Jacob, 100 William Street.
 Havemeyer, W. F., 32 Nassau Street.
 Hay, O. P., American Museum Natural History.
 Haynes, Miss Caroline C., 16 East 36th Street.
 Hays, B. Frank, Bensonhurst.
 Hazen, Tracy E., 174 West 87th Street.
 Hearn, David William, 30 West 16th Street.
 Hendricks, Henry H., 49 Cliff Street.
 Henrich, Carl, Room 1014 No. Broad Street.
 Henzey, Samuel Alexander, 52 Broadway.
 Hering, Daniel Webster, New York University.
 Hering, Rudolph, 170 Broadway.
 Herman, Mrs. Esther, 59 West 56th Street.
 Herter, Christian A., 819 Madison Avenue.
 Herzog, Felix B., 51 West 24th Street.
 Higginson, James J., 16 East 41st Street.
 Higley, Warren, 68 West 40th Street.
 Himowich, Adolph A., 130 Henry Street.
 Hinton, John H., 41 West 32d Street.
 Hiss, P. Hanson, 437 West 59th Street. .
 Hitchcock, Romyn, 20 Broad Street.
 Hodges, Miss Julia, 57 West 39th Street.
 Hoe, Mrs. R., Jr., 11 East 36th Street.
 Hoe, Mrs. Richard M., 11 East 71st Street.
 Holbrook, Percy, 145 West 69th Street.
 Holden, Edwin R., 13 East 79th Street.
 Hollick, Arthur, Bronx Park.
 Holt, Chas., 255 North 45th Street.
 Holt, Henry, 29 West 23d Street.
 Homer, Charles S., 245 Broadway.
 Hopkins, George B., 52 Broadway.
 Hovey, Edmund O., American Museum Natural History.
 Howe, Henry M., Columbia University.
 Howe, J. Morgan, 12 West 46th Street.
 Howe, Marshall A., Bronx Park.
 Howell, Wilson Stout, 14 Jay Street.
 Hrdlicka, Alës, American Museum Natural History.
 Hubbard, Walter C., Coffee Exchange Building.
 Huddleston, John H., 126 West 85th Street.
 Humphreys, Alexander C., 31 Nassau Street.
 Hunter, George W., Jr., 2297 Loring Place.
 Huntington, G. S., Columbia University.

GEOGRAPHICAL DISTRIBUTION—N. Y.

Hyde, B. T. Babbitt, 20 West 53d Street.
 Hyde, E. Francis, Hotel Netherland.
 Hyde, Miss Elizabeth Mead, 210 East 18th Street.
 Hyde, Frederick E., 20 West 53d Street.
 Hyde, Frederick E., Jr., 20 West 53d Street.
 Hyde, Henry St. J., 210 East 18th Street.
 Ingram, Edw. L., N. Y. Navy Yard.
 Jackson, Victor H., 240 Lenox Ave.
 Jacoby, Harold, Columbia University.
 Jarvis, Samuel M., 1 West 72d Street.
 Jefferis, William W., 442 Central Park, West.
 Jenks, William Johnson, 120 Broadway.
 Jesup, Morris K., 44 Pine Street.
 Johnson, Willis G., 52 Lafayette Place.
 Johnston, Thomas J., 66 Broadway.
 Johnstone, William Bard, 22 West 25th Street.
 Jones, Adam L., Columbia University.
 Julien, Alexis A., Academy of Sciences.
 Kahn, Julius, 100 West 80th Street.
 Kasner, Edw., Columbia University.
 Kean, Mrs. Hamilton Fish, 25 East 37th Street.
 Kemp, James F., Columbia University.
 Keppel, F. P., Columbia University.
 Keppler, Rudolph, 28 West 70th Street.
 Ketchum, Alexander P., 32 Mt. Morris Park, West.
 Keyser, Cassius Jackson, Columbia University.
 Klepetko, Frank, 1011 Maritime Building.
 Knox, Henry H., 110 East 23d Street.
 Koues, Miss Elizabeth L., 282 West 85th Street.
 Kummer, Frederic Arnold, 29 Broadway.
 Kunhardt, Wheaton B., 1 Broadway.
 Kunz, G. F., Union Square.
 La Fetra, Linnaeus Edford, 58 West 58th Street.
 Lange, J. D., 220 West 79th Street.
 Langmann, Gustav, 121 West 57th Street.
 Laudy, Louis H., Columbia University.
 Leaming, Edward, 437 West 59th Street.
 Leavitt, Frank M., 258 Broadway.
 Ledoux, Albert R., 99 John Street.
 Lee, Frederic S., 437 West 59th Street.
 Levene, P. A., 1 Madison Avenue.
 Levine, Edmund J., 638 Broadway.
 Lewis, Clarence McK., care Wm. Salomon & Co., 25 Broad Street.
 Lindenthal, Gustav, 45 Cedar Street.
 Ling, George H., Columbia University.

GEOGRAPHICAL DISTRIBUTION—N. Y.

Linville, Henry R., 509 West 112th Street.
 Livingston, Burton E., Bronx Park.
 Lloyd, Francis E., Columbia University.
 Lloyd, Mrs. Mary Elizabeth, Columbia University.
 Lobenstine, William C., 245 Central Park, West.
 Loeb, Morris, 118 West 72d Street.
 Loewy, Benno, 206 and 208 Broadway.
 Logan, Walter S., 27 William Street.
 Lough, J. E., New York University.
 Love, Edward G., 80 East 55th Street.
 Low, Seth, Mayor's Office.
 Luquer, Lea McIlvane, Columbia University.
 Lyman, Chester W., 30 Broad Street.
 McAlpin, P. W., 55 West 33d Street.
 MacDougal, Daniel T., Bronx Park.
 MacDougall, George R., 131 West 73d Street.
 MacDougall, Robert, Sedgwick Park.
 MacFarland, W. W., 22 William Street.
 MacIntyre, Miss Lucy, 303 West 74th Street.
 Mack, Jacob W., 92 Liberty Street.
 McGregor, James H., Columbia University.
 McKeag, Miss Anna J., 14 East 16th Street.
 Maclay, James, Columbia University.
 McMillin, Emerson, 40 Wall Street.
 McMurtrie, William, 100 William Street.
 McMulty, John J., College of City of New York.
 McNulty, Geo. Washington, 258 Broadway.
 MacVannel, John A., Columbia University.
 Macy, V. Everit, 68 Broad Street.
 Magee, Louis J., 25 Broad Street.
 Magill, William S., Dry Milk Co., 11 Broadway.
 Maltby, Margaret E., Barnard College.
 Mapes, Charles Victor, 60 West 40th Street.
 Marks, Louis B., 687 Broadway.
 Martin, W. R. H., 56 West 33d Street.
 Marvin, Harry Norton, 11 East 14th Street.
 Meltzer, S. J., 166 West 126th Street.
 Merrill, Earle Abbott, 26 Cortlandt Street.
 Merrill, Payson, 111 Broadway.
 Mershon, Ralph D., 621 Broadway.
 Metcalfe, Henry, 143 Liberty Street.
 Meyer, Adolf, N. Y. State Hospital, Wards Island.
 Miller, Edmund H., Columbia University.
 Miller, George N., 811 Madison Avenue.
 Mitchell, Edward, 44 Wall Street.

- Mitchell, Henry Bedinger, Columbia University.
 Mitchell, Roland G., 141 Water Street.
 Mitchell, Samuel A., Columbia University.
 Morison, George Shattuck, 49 Wall Street.
 Morris, Henry L., 16 Exchange Place.
 Morris, Newbold, 52 East 72d Street.
 Morris, Robert T., 58 West 56th Street.
 Morrison, Chas. E., 131 Hamilton Place.
 Moses, Alfred J., Columbia University.
 Mullin, Edward Hemphill, 44 Broad Street.
 Myers, William S., 12 John Street.
 Nash, George V., Norwood Heights.
 Nesmith, Henry E., Jr., 28 South Street.
 Nichols, Ernest Fox, Columbia University.
 Niles, Robert Lossing, 66 Broadway.
 Oakes, F. James, 58 Stone Street.
 O brig, Adolph, "The Dakota."
 O'Connor, Joseph, 146 Frank Street.
 Ogden, Herbert Gouverneur, Jr., The Royalton Hotel, 44 West 44th Street.
 Ogilvie, Miss Ida H., Sherman Square Hotel.
 Opdyke, William S., 20 Nassau Street.
 Osborn, Henry F., Columbia University.
 Osburn, Raymond C., Columbia University.
 Paltsits, Victor Hugo, Lenox Library.
 Parish, Henry, 52 Wall Street.
 Park, William Hallock, 315 West 76th Street.
 Parsell, Henry V. A., 31 East 21st Street.
 Parsons, Mrs. Edwin, 326 West 90th Street.
 Parsons, John E., 111 Broadway.
 Patten, John, 325 East 97th Street.
 Patterson, Frank A., 141 Broadway.
 Pearson, Fred. Stark, Room 220, 29 Broadway.
 Pearson, Raymond A., 626 Madison Avenue.
 Peckham, Wheeler H., 80 Broadway.
 Pegram, George B., Columbia University.
 Penniman, George H., 1071 Fifth Avenue.
 Pepper, George H., American Museum Natural History.
 Peterson, Frederick, 4 West 50th Street.
 Phillips, John S., 141 East 25th Street.
 Pitkin, Lucius, 47 Fulton Street.
 Plant, Albert, 28 East 76th Street.
 Platt, Thomas C., 48 Broadway.
 Plimpton, George Arthur, 70 Fifth Avenue.
 Porter, H. Hobart, Jr., 31 Nassau Street.

- Potter, Mrs. Henry C., 347 West 89th Street.
 Powel, de Veaux, 28 Broadway.
 Pratt, Joseph H., 74 Broadway.
 Prince, J. Dyneley, 15 Lexington Avenue.
 Pritchard, William Broadbuss, 105 West 73d Street.
 Proudfit, Alexander Couper, 40 Wall Street.
 Pupin, M. I., Columbia University.
 Quackenbos, John D., 331 West 28th Street.
 Radin, Paul, 347 East 116th Street.
 Raymond, Rossiter W., 99 John Street.
 Rees, John K., Columbia University.
 Reid, Whitelaw, 451 Madison Avenue.
 Reuter, Ludwig H., 434 East 87th Street.
 Rice, Calvin Winsor, 44 Broad Street.
 Rich, Michael P., 50 West 38th Street.
 Richard, Montrose, 77 East 116th Street.
 Richards, Edgar, 341 West 88th Street.
 Richards, Herbert, Columbia University.
 Rickard, T. A., 261 Broadway.
 Ricketts, Louis D., 99 John Street.
 Ricketts, Pierre de Peyster, 104 John Street.
 Ries, Elias E., 116 Nassau Street.
 Riker, Samuel, 27 East 69th Street.
 Robb, J. Hampden, 23 Park Avenue.
 Rogers, Edward L., 71 Broadway.
 Roney, Wm. R., 10 Bridge Street.
 Rothschild, Jacob, Hotel Majestic.
 Rupp, August, College of City of New York.
 Rusby, Henry H., 115 West 68th Street.
 Russak, Frank, 19 East 65th Street.
 Russell, James E., Teachers' College.
 Rydberg, P. A., Bronx Park.
 Sachs, B., 21 East 65th Street.
 Sando, Will J., 120 Liberty Street.
 Satterlee, F. LeRoy, 8 West 18th Street.
 Savage, Watson L., Columbia University.
 Saville, Marshall H., American Museum Natural History.
 Schermerhorn, F. Aug., 101 University Place.
 Schermerhorn, William C., 49 West 23d Street.
 Schernikow, Ernest, P. O. Box 1191.
 Schieffelin, Eugene, 865 Madison Avenue.
 Schieren, Charles A., Brooklyn.
 Schiff, Jacob H., P. O. Box 1193.
 Schirmer, Gustave, 117 East 35th Street.
 Schmitt, A. Emil, 103 East 60th Street, The Palermo.

- Schöney, L., 143 West 142d Street.
 Schultz, Carl H., 430-444 First Avenue.
 See, Horace, 1 Broadway.
 Seligman, Isaac N., Mills Building.
 Sever, George F., Broadway and 117th Street.
 Seymour, George S., 17 Battery Place.
 Shafer, John A., Bronx Park.
 Shepherd, Miss Elizabeth, 253 West 128th Street.
 Sherman, Henry C., Columbia University.
 Sherwood-Dunn, B., 26 Broadway.
 Shiland, Andrew, Jr., 262 West 78th Street.
 Sickles, Ivin, 17 Lexington Avenue.
 Skeel, Frank D., 58 East 25th Street.
 Small, John Kunkel, Bronx Park.
 Smith, Arthur, 152 Broadway.
 Smith, Ernest Ellsworth, 262 Fifth Avenue.
 Smith, Harlan I., American Museum Natural History.
 Soper, George A., 29 Broadway.
 Soule, R. H., 917 Seventh Avenue.
 Spaulding, Edward G., College of the City of New York.
 Spicer, Walter E., 312 West 51st Street.
 Spofford, Paul N., P. O. Box 1667.
 Stanley-Brown, Joseph, 128 Broadway.
 Stanton, John R., 11 and 13 William Street.
 Stanton, Robert B., 66 Broadway.
 Starr, M. Allen, 5 West 54th Street.
 Starrett, M. G., 349 West 85th Street.
 Stern, Philip Kossuth, 130 Fulton Street.
 Stevens, Edward Lawrence, 59th Street and Park Avenue.
 Stevens, George T., 22 East 46th Street.
 Stevenson, John J., University Heights.
 Stieringer, Luther, 129 Greenwich Street.
 Stillwell, Lewis Buckley, Park Row Building.
 Stokes, Anson Phelps, 47 Cedar Street.
 Stone, Mason A., 161 Broadway.
 Strong, Oliver S., Columbia University.
 Strong, Wendell M., 32 Nassau Street.
 Sumner, Francis B., College of the City of New York.
 Taggart, Rush, 319 West 75th Street.
 Tatlock, John, Jr., 32 Nassau Street.
 Taylor, Henry Ling, 125 West 58th Street.
 Tesla, Nikola, 55 West 27th Street.
 Thompson, Robert M., 99 John Street.
 Thompson, W. Gilman, 34 East 31st Street.
 Thorndike, E. L., Columbia University.

- Thorne, Mrs. Phœbe Anna, 558 Madison Avenue.
 Thorne, Samuel, Jr., 55 Liberty Street.
 Tiffany, L. C., 27 East 72d Street.
 Titus, E., Jr., 10 East 70th Street.
 Tower, Ralph Winfred, American Museum of Natural History.
 Trask, Spencer, 27 Pine Street.
 Treat, Erastus B., 241-243 West 23d Street.
 Trowbridge, Charles Christopher, Columbia University.
 Tucker, Wm. C., 156 Fifth Avenue.
 Tuckerman, Alfred, 342 West 57th Street.
 Tufts, Frank Leo, Columbia University.
 Turner, J. Spencer, 71 Worth Street.
 Tweedy, Alice B., Spuyten Duyvil.
 Underwood, Lucien M., Columbia University.
 Vail, Miss Anna Murray, 29 Washington Square.
 Valentine, Morris Crawford, 259 West 131st Street.
 Van Amringe, John Howard, Columbia University.
 Van Beuren, Frederick T., 21 West 14th Street.
 Vanderbilt, Cornelius, 602 Fifth Avenue.
 Van Winkle, Edgar B., 115 East 70th Street.
 Venable, Wm. Mayo, 11 Broadway.
 Villard, Mrs. Henry, 145 West 58th Street.
 Vineberg, Hiram N., 751 Madison Avenue.
 Waddell, Montgomery, 135 Broadway.
 Wainwright, John William, 177 West 83d Street.
 Wales, Charles M., 11 Broadway.
 Wales, Salem H., 25 East 55th Street.
 Walker, James, 49 Maiden Lane.
 Walsh, James J., 1973 Seventh Avenue.
 Walter, W. J., 115 West 57th Street.
 Ward, J. Langdon, 120 Broadway.
 Ward, Willard Parker, 164 West 58th Street.
 Ware, William R., Columbia University.
 Warren, William R., 68 William Street.
 Washington, Charles Milnor, 56 East 53d Street.
 Watterson, Miss Ada, 153 West 84th Street.
 Webster, Albert Lowry, 112 East 40th Street.
 Weeks, John Elmer, 46 East 57th Street.
 Wetzler, Joseph, 240-242 West 23d Street.
 Wheeler, William Morton, American Museum of Natural History.
 Whitaker, Milton C., Columbia University.
 White, Horace, 18 West 69th Street.
 Whitfield, R. P., American Museum Natural History.
 Wiechmann, F. G., 310 West 80th Street.
 Wightman, Merle J., 302 Broadway.

GEOGRAPHICAL DISTRIBUTION—N. Y.

Wilbour, Mrs. Charlotte B., 40 Central Park, South.
Wiley, William H., 43 East 19th Street.
Williams, Arthur, 55 Duane Street.
Williamson, G. A., 14 Dey Street.
Wilson, E. B., Columbia University.
Wingate, Miss Hannah S., 23 West 129th Street.
Witthaus, R. A., Cornell Medical College.
Wolf, August S., 120 Broadway.
Wood, Mrs. Cynthia A., 171 West 47th Street.
Wood, Matthew P., 234 West 44th Street.
Wood, Thomas D., Columbia University.
Woodbridge, Frederick J., Columbia University.
Woodhull, John Francis, Teachers' College.
Woodman, Durand, 127 Pearl Street.
Woods, John A., 120 Broadway.
Woodward, Anthony, American Museum Natural History.
Woodward, R. S., Columbia University.
Woodworth, R. S., 338 East 26th Street.
Wyeth, John A., 19 West 35th Street.
Zalinski, E. L., 7 West 43d Street.

NIAGARA FALLS.

Acheson, Edward G.
Barton, Philip Price, 127 Buffalo Avenue.
Converse, Vernon G., Box 154.
Fitz Gerald, Francis A. J., P. O. Box 118.
Hall, Charles M., Pittsburg Reduction Company.

NORWICH.

Davis, Edward E., 47 West Main Street.

NYACK.

Bradley, Stephen R.

OXFORD.

Burdick, Lewis Dayton.

PEEKSKILL.

Orleman, Miss Daisy M., Peekskill Military Academy.
Orleman, Louis H., Peekskill Military Academy.

PEN YAN.

Taylor, Edward Randolph.

PLATTSBURGH.

Hudson, George H., State Normal and Training School.

POLAND CENTER.

Cheney, Newel.

GEOGRAPHICAL DISTRIBUTION—N. Y.

PORT CHESTER.

Gregg, William H.

Roberts, Miss Jennie B., 231 William Street.

PORT RICHMOND.

Dowell, Philip, High School.

POTSDAM.

Aldrich, William S., Clarkson School of Technology.

Griffith, John Howell, Clarkson School of Technology.

Stowell, T. B.

POUGHKEEPSIE.

Bawden, H. Heath, Vassar College.

Cooley, LeRoy C., Vassar College.

Dwight, William B., Vassar College.

Furness, Miss Caroline E., Vassar College Observatory.

Kauffman, William A., 73 Hooker Avenue.

Stone, Miss Isabelle, Vassar College.

Thelberg, Miss Elizabeth B., Vassar College.

Whitney, Miss Mary W., Vassar College.

PRINCE BAY.

Johnston, William A.

PULASKI.

Just, John A., Jefferson Avenue and Delano Street.

RIPLEY.

Gardner, Corliss B.

ROCHESTER.

Bausch, Edward, P. O. Drawer 1033.

Bausch, Henry, P. O. Drawer 1033.

Beckwith, Miss Florence, 394 Alexander Street.

Davison, John M., 340 Oxford Street.

Dodge, Charles Wright, University of Rochester.

Drescher, Willibald A. E., P. O. Drawer 1033.

Eaton, Elon H., 209 Cutler Building.

Fairchild, H. L., University of Rochester.

Gilbert, Charles B., 106 Brunswick Street.

Hale, George D., 1059 Lake Avenue.

Lattimore, S. A., University of Rochester.

Lawrence, Harry E., University of Rochester.

Lindsay, Alexander M.

Lomb, Adolph, P. O. Drawer 1033.

Lomb, Henry, P. O. Drawer 1033.

Lomb, Henry C., P. O. Drawer 1033.

McCartney, James H., Room 501 Granite Building.

GEOGRAPHICAL DISTRIBUTION—N. Y.

Paine, Cyrus F., 242 East Avenue.
Reche, Miss Eugénie M., 31 Howell Street.
Robinson, Otis Hall, University of Rochester.
Townson, Andrew J., Granite Building.
Ward, Frank A., 16-26 College Avenue.

SCHENECTADY.

Andrews, William Symes, General Electric Company.
Curtiss, Richard Sydney, Union University.
Gantt, Henry Lawrence, care of American Locomotive Company.
Hoffman, Frank S., Union University.
Landreth, Olin H., Union University.
Lovejoy, J. R., 811 Union Street.
Mortensen, Casper, 13 Cedar Street.
Potter, William B., General Electric Company.
Reist, Henry G., 5 South Church Street.
Rice, Edwin Wilbur, Jr., General Electric Company.
Riddell, John, 1132 State Street.
Steinmetz, Charles Proteus, General Electric Company.
Wheeler, E. B., Union University.

SCHOHARIE.

Sias, Solomon.

STAATSBURG-ON-HUDSON.

Landon, Francis G.

STAPLETON.

Hunt, Charles Wallace.
Bardwell, Darwin L.

SYRACUSE.

Barr, John Henry, care of Smith-Premier Typewriter Co.
Bardeen, Charles William, 406 S. Franklin Street.
Bullard, Warren Gardner, Syracuse University.
Clark, Gaylord Parsons, Syracuse University.
Cogswell, William B.
Cooper, Hermon Charles, Syracuse University.
French, E. L., Crucible Steel Company of America.
Hargitt, Charles W., Syracuse University.
Hopkins, Thomas Cramer, Syracuse University.
Kent, Wm., Syracuse University.
Kenyon, Oscar Curtis, High School.
Kirkwood, Joseph E., Syracuse University.
Kraus, Edward H., Syracuse University.
Marlow, Frank William, 200 Highland Street.
Mathews, John A., Crucible Steel Co. of America.
Metzler, William H., Syracuse University.
Porter, J. Edward, 8 Clinton Block.

GEOGRAPHICAL DISTRIBUTION—N. Y.

Reese, Albert M., Syracuse University.
Roe, Edward Drake, Jr., Syracuse University.
Saunders, F. A., Syracuse University.
Smallwood, Martin, Syracuse University.
Steensland, Halbert Severin, 614 South Salma Street.
Totman, David M., 303 Montgomery Street.
Towle, William M., Syracuse University.
Van Duyn, John, 318 James Street.

TARRYTOWN.

Barnhart, John H.
Coutant, Richard B.
Garnier, Madame Laure Russell, The Castle.

TIVOLI.

de Peyster, Johnston L.

TROY.

Crockett, Charles W., Rensselaer Polytechnic Institute.
Hanaman, C. E.
Houston, David Walker, 18 Second Street.
Marsh, James P., 1828 Fifth Avenue.
Mason, William P., Rensselaer Polytechnic Institute.
Peck, Mrs. John Hudson, 3 Irving Place.
Raymond, William G., Rensselaer Polytechnic Institute.
Ricketts, Palmer C., 30 Second Street.
Ward, R. H., 53 Fourth Street.

TURIN.

Church, Royal Tyler.

TUXEDO PARK.

Collier, Price.
Douglas, Mrs. George William.

UTICA.

Babcock, Stephen E., 54-56 Mann Building.
Dimon, Miss Abigail C., 367 Genesee Street.
Golden, Harry E., Mann Building.

WAVERLY.

Hilton, William A., 435 Penn Avenue.

WELLSVILLE.

Hall, Edwin Bradford.

WEST NEW BRIGHTON.

Berry, Edgar H.
Serrell, Edward Wellman, Forest Avenue.

WHITE PLAINS.

Schmid, H. Ernest.

YONKERS.

Crehore; Albert C., 48 Lincoln Terrace.
Johnson, Frank Edgar, 747 Warburton Avenue.

NORTH CAROLINA.

ABERDEEN.

Juat, Francis.

ASHEVILLE.

von Ruck, Karl, Winyah Sanitarium.

CHAPEL HILL.

Baskerville, Charles, University of North Carolina.
Cain, William, University of North Carolina.
Cobb, Collier, University of North Carolina.
Coker, William Chambers, University of North Carolina.
Duerden, J. E., University of North Carolina.
Gore, J. W., University of North Carolina.
Holmes, Joseph A., North Carolina Geological Survey.
Mills, James Edward.
Myers, Edward W., North Carolina Geological Survey.
Venable, F. P.
Wheeler, Alvin Sawyer, University of North Carolina.
Wilson, Henry Van Peters, University of North Carolina.

CONCORD.

Satterfield, David J., Scotia Seminary.

CRONLY.

Van Dyck, William Van Bergen.

DURHAM.

Hamaker, John Irvin, Trinity College.

GREENSBORO.

Bryant, Miss D. L., 218 Ashe Street.

RALEIGH.

Ashe, W. Willard.
Chittenden, Thomas A., Agricultural and Mechanical College.
Kilgore, Benj. W.
Massey, Wilbur Fisk, Agricultural Experiment Station.
Sackett, Walter George, Baptist Female University.
Sherman, Franklin, Jr.
Stevens, Frank L.
Von Herrman, C. F., U. S. Weather Bureau.
Williams, Charles B., North Carolina Department of Agriculture.
Withers, W. A., Agricultural and Mechanical College.

GEOGRAPHICAL DISTRIBUTION—N. C.—OHIO.

WAKE FOREST.

Brewer, Charles Edward, Wake Forest College.
Lanneau, John Francis, Wake Forest College.
Poteat, William L.

WILMINGTON.

Vest, Solomon Alexander, Navassa Guano Company.

WINSTON.

Ludlow, Jacob Lott, 434 Summit Street.

NORTH DAKOTA.

AGRICULTURAL COLLEGE.

Bolley, Henry L., Agricultural College.

FARGO.

Griggs, Robert F., Fargo College.
Ladd, Prof. E. F.

FORKS.

George, Walter, University of North Dakota.

UNIVERSITY.

Chandler, Elwyn Francis, University of North Dakota.

VALLEY CITY.

Perrine, Miss Lura L., State Normal School.

OHIO.

ACADEMIA.

Secor, William Lee.

AKRON.

Green, Miss Isabella M., 111 Union Place.
Knight, Charles M., 219 South Union Street.
Replogle, Mark A., 111 South Walnut Street.
Shaw, Edwin C., 104 Park Street.

ALLIANCE.

Fawcett, Ezra, 233 Ely Street.
Soule, William, Mt. Union College.
Yanney, Benjamin F., Mt. Union College.

ASHTABULA.

Snyder, Fred. D., 10 Center Street.

GEOGRAPHICAL DISTRIBUTION—OHIO.

ATHENS.

Bentley, Wm. B., Ohio University.
Hoover, William.
Mercer, William Fairfield, Ohio University.

BARNESVILLE.

York, Lewis E.

CINCINNATI.

Ayers, Howard, University of Cincinnati.
Behrend, Bernhard Arthur, Station H.
Benedict, Harris Miller, 103 West St. Clair Street.
Bouscaren, Louis Frederic Gustav, City Hall.
Burke, M. D., 404 Pike Building.
Cincinnati, Public Library of.
Cushing, John J., 1001 Union Trust Building.
Dunham, Kennon, Auburn Avenue and McMillan Street.
Everts, Orpheus, The Cincinnati Sanitarium.
Guyer, M. F., University of Cincinnati.
Hillkowitz, William, 704 Race Street.
Holmes, Christian R., 8-10 East 8th Street.
Homberg, Frederick, Woodward High School.
Hyde, E. W., Station D.
Jewett, William Cornell, 541 Ridgeway Avenue.
Johnston, Arthur W., Madison Road.
Lloyd, John Uri, Court and Plum Streets.
Lyle, Benjamin F., 2302 West Eighth Street.
Merryweather, George N., 639 Forest Avenue, Avondale.
Powell, James, 2525 Spring Grove Avenue.
Ransohoff, Joseph.
Springer, Alfred, 312 East 2d Street.
Stewart, Robert W., The Oritz.

CLEVELAND.

Avery, Elroy M., 657 Woodland Hills Avenue.
Baldwin, S. Prentiss, 736 Prospect Street.
Biggar, Hamilton F., 176 Euclid Avenue.
Brush, Charles F., 1003 Euclid Avenue.
Burton, Theodore E.
Case, Eckstein, Case School.
Chadwick, Leroy S., 1824 Euclid Avenue.
Cook, Samuel R., Case School.
Cowles, Alfred H., 656 Prospect Street.
Crile, Geo. W., 169 Kensington Street.
Curtis, Mattoon M., Western Reserve University.
Cushing, Henry Platt, Adelbert College.
Dutton, Charles Frederic, Jr., 626 Franklin Avenue.

GEOGRAPHICAL DISTRIBUTION—OHIO.

Emmerton, Frederic Augustus, 9 Bratenahl Building.
Focke, Theodore M., Case School.
Frost, Arthur Barzilla, 33 Fay Street.
Greenman, Jesse M., 875 Doan Street.
Gruener, Hippolyte, Adelbert College.
Herrick, Francis Hobart, Adelbert College.
Hobbs, Perry L., Western Reserve Medical College.
Holden, Mrs. L. E., "The Hollenden."
Howe, Charles S., Case School.
Hower, Harry Sloan, Case School.
Knox, Wilm, Society for Savings Building.
LeBaron, John F., 1329 Williamson Building.
McGee, John Bernard, 1405 Woodland Avenue.
Mabery, Professor C. F., Case School.
Marvin, Walter T., 36 Knox Street.
Miller, Dayton C., Case School.
Morley, Edward W., Adelbert College.
Moulton, W. H., Mayfield Heights.
Peskind, Arnold, 1354 Wilton Avenue.
Price, Weston A. V., 2238 Euclid Avenue.
Robb, Hunter, 702 Rose Building.
Smith, Albert W., Case School of Applied Science.
Smith, Charles J., 35 Adelbert Street.
Sollmann, Torald, Western Reserve Medical College.
Spencer, John G., 1116 Rose Building.
Stair, Leslie D., 1062 E. Madison Avenue.
Stockwell, John N., 1008 Case Avenue.
Tower, Olin F., Adelbert College.
Tunstall, Whitmell Pugh, B. & O. Depot.
Waite, Frederick C., Western Reserve Medical College.
Warner, Worcester R., 1722 Euclid Avenue.
Whitman, Frank P., Adelbert College.

COLUMBUS.

Alspach, E. F., West 6th Avenue.
Blackburn, Joseph E., Box 231.
Bleile, Albert M., Ohio State University.
Bownocker, J. A., Ohio State University.
Boyd, James E., Ohio State University.
Cole, Alfred D., Ohio State University.
Detmers, Fredericka, 1315 Neil Avenue.
Foult, Charles W., Ohio State University.
Haines, Thomas, Ohio State University.
Heffrin, Harry, care The Columbus Iron and Steel Co.
Henderson, William Edward, Ohio State University.
Hine, James S., Ohio State University.

GEOGRAPHICAL DISTRIBUTION—OHIO.

Hitchcock, Embury A., 380 West 8th Avenue.
 Howard, Curtis C., 97 Jefferson Avenue.
 Kellerman, William A., Ohio State University.
 Kester, Frederick Edward, Ohio State University.
 Lawrence, Florus F., 423 East Town Street.
 Lazenby, W. R.
 McPherson, William, Ohio State University.
 Magruder, William T., Ohio State University.
 Major, David R., Ohio State University.
 Mead, Charles S., 217 King Avenue.
 Mills, William C., Ohio State University.
 Morrey, Charles B., Ohio State University.
 Morse, Max W., Ohio State University.
 Orton, Edward, Jr., "The Normandie."
 Osborn, Herbert, Ohio State University.
 Prosser, Charles S., Ohio State University.
 Quiroga, Modesto, 127 West 11th Avenue.
 Riddle, Lumina C., 160 West 5th Avenue.
 Robinson, Stillman W., 1353 Highland Street.
 Ruppertsberg, Miss Emma A., 842 South High Street.
 Schaffner, John H., Ohio State University.
 Stone, Julius F.
 Talbot, Miss Mignon, 167 West Tenth Avenue.
 Thomas, Benjamin F., Ohio State University.
 Tuckerman, Louis B., 145 Worthington Street.
 Weber, Henry A., Ohio State University.
 Williamson, Homer D., 133 W. 10th Avenue.

COVINGTON.

Albaugh, Maurice.
 Gold, James Douglas.

DAYTON.

Houk, Mrs. Eliza P. T., P. O. Box 94.
 Lowe, Houston.

DEFIANCE.

Slocum, Charles E.

DELAWARE.

Duvall, Trumbull G., Wesleyan University.
 Hormell, William G., Ohio Wesleyan University.
 Rice, Edward L., Ohio Wesleyan University.
 Westgate, Lewis Gardner, Ohio Wesleyan University.

ELYRIA.

Little, C. A., Box 517.

FRÉDERICKTOWN.

Pennell, William W.

GAMBIER.

Halsted, George Bruce, Kenyon College.

GEOGRAPHICAL DISTRIBUTION—OHIO.

GRANVILLE.

Herrick, C. Judson, Denison University.

GREENVILLE.

Plowman, Amon B.

HAMILTON.

See, James W., Opera House.

HIRAM.

Colton, Geo. H., Hiram College.

Young, Clinton Mason.

MT. VERNON.

Grimm, Carl Robert, 103 North Vernon Street.

MARIETTA.

Corwin, Clifford E., High School.

McKinney, Thomas Emory, Marietta College.

Marietta College Library.

Monfort, Wilson F., Marietta College.

Wolfe, Elmer Ellsworth, Marietta College.

MECHANICSBURG.

Hotchkiss, Elmer A.

NEW CARLISLE.

Thompson, James E.

NORTH BALTIMORE.

Wenner, Francis W.

OBERLIN.

Baird, Robert Logan, Oberlin College.

Grover, Frederick Orville, Oberlin College.

Jewett, Frank Fanning, Oberlin College.

Jones, Lynds, Oberlin College.

St. John, Charles E., 125 Elm Street.

Wright, Albert A., Oberlin College.

Wright, George Frederick, Drawer C.

OXFORD.

Porter, Miss Caroline Johnson, The Western College.

Williams, Stephen Riggs, Miami University.

PAINESVILLE.

Mathews, Miss Mary Elizabeth.

PLAINVILLE.

Hurd, E. O.

RUSHSVLVANIA.

Sutton, Jasper G.

GEOGRAPHICAL DISTRIBUTION—OHIO.

SALEM.

Mansfield, Albert K., 125 Lincoln Avenue.

SANDUSKY.

Curran, Ulysses T.

Moseley, Edwin L., High School.

SIGNAL.

McMillan, Smith B.

SPRINGFIELD.

Linn, Alvin Frank, Wittenberg College.

Weaver, Edwin Oscar, Wittenberg College.

TIFFIN.

Bunn, J. F.

Hornung, Christian, Heidelberg University.

TOLEDO.

Bessey, J. Mortimer, 1814 Adams Street.

Hillig, Frederick J., St. Johns College.

Savage, Thomas E., Western College.

URBANA.

Collett, Samuel W., High School.

WARREN.

Pierce, Sloan J., R. F. D. No. 4.

WEST MILTON.

Jennings, Gainor.

WESTERVILLE.

Haywood, John, Otterbein University.

McFadden, L. H.

Miller, Frank E., Otterbein University.

WHEELERSBURG.

Taylor, James Landon.

WILMINGTON.

Bennett, N. E.

WOOSTER.

Bennett, William Z., University of Wooster.

Hyatt, William.

Mateer, Horace N.

Selby, Augustine Dawson, Agricultural Experiment Station.

Todd, J. H., Christmas Knoll.

Wilson, Wm. H., University of Wooster.

GEOGRAPHICAL DISTRIBUTION—OHIO—PA.

WYOMING.

Twitchell, E.

YOUNGSTOWN.

McKee, George C., care The William Tod Company.

OKLAHOMA.

STILLWATER.

Chandler, Richard E.

Shaw, Walter Robert, Agricultural and Mechanical College.

OREGON.

BAKER CITY.

Packard, George A.

FOREST GROVE.

Coghill, George E., Pacific University.

MT. ANGEL.

Epper, Frowin.

PORTLAND.

Cheney, Williard C.

Coe, Henry W., "The Marquam."

Lawbaugh, Elmer A., Oregonian Building.

Robinson, Samuel Adams, 135 North 22d Street.

Rockey, A. E., 778 Flanders Street.

PENNSYLVANIA.

ALLEGHENY.

Albree, Chester B., 14-30 Market Street.

Biggins, J. Edgar, 1329 Federal Street.

Boucek, Anthony J., 624 Chestnut Street.

Brashear, John A.

Connelley, C. B.

Deens, Miss Anna M., 216 North Avenue, West.

Forcee, Miss Margaret P., Arch near Ohio Street.

Phillips, Francis C., Box 126.

Smith, Miss Jennie M., 40 Library Place.

Smith, Miss Matilda H., 40 Library Place.

Snyder, William E., 510 East North Avenue.

Turnbull, Thomas, Jr., Allegheny University.

Wadsworth, F. L. O., Western University of Pennsylvania.

Young, S. Edward, 2512 Perrysville Avenue.

ALLENTOWN.

Hunsicker, George W., 141 North 8th Street.

Kress, Palmer J., 636 Hamilton Street.

Whitehorne, William Risley, 462 Walnut Street.

GEOGRAPHICAL DISTRIBUTION—PA.

ALTOONA.

Dudley, Charles B., Drawer 56.

ANNVILLE.

Enders, Howard Edwin, Lebanon Valley College.
McFadden, Thomas Gilbert, Lebanon Valley College.

ATHENS.

Stevens, Cyrus Lee.

BEAVER.

Hice, Richard R.

BELLWOOD.

Sargent, Miss Annie B.

BETHLEHEM.

Hall, Robert W., 331 Church Street.
Lambert, Preston A., 215 South Center Street.
Laramy, Robert Edward, 27 North New Street.
Rau, Albert George, 63 Broad Street.
Robbins, Fred. W.
Tunstall, Whitmell Pugh, 326 Wyandotte Street, South.

BLAIRSVILLE.

Klingensmith, Israel P.

BRADDOCK.

Crane, Walter, Carnegie Free Library.
Morrison, Thomas, Edgar Thomson Steel Works.

BROOKVILLE.

Jenks, William H.

BRYN MAWR.

Bascom, Miss Florence, Bryn Mawr College.
Keasbey, Lindley M., Bryn Mawr College.
Warren, Joseph W.

CALIFORNIA.

Banker, Howard J.
Harmon, Herbert W., South-Western State Normal School.

CARLISLE.

Himes, Charles F.
Landis, W. W., Dickinson College.
Mohler, John F., Dickinson College.
Pilcher, James Evelyn, Dickinson College.
Spangler, Harry Allen.
Stephens, Henry Matthew, Dickinson College.

CASTLE SHANNON.

Fetterman, John Calvin.

COLLEGEVILLE.

Gummere, Henry Volkmar, Ursinus College.

Shaw, Charles Hugh, Ursinus College.

COLUMBIA.

Craig, Alexander Righter, 232 Cherry Street.

COOPERSBURG.

Boyé, Martin H.

DOYLESTOWN.

Fretz, Augustus Henry.

Mercer, H. C.

DRIFTON.

Coxe, Eckley B., Jr.

EASTON.

Brasefield, Stanley E., Lafayette College.

Coffin, Selden J., Lafayette College.

Davison, Alvin, Lafayette College.

Eyerman, John, "Oakhurst."

Firmstone, F.

Fretz, John Edgar, 112 North 3d Street.

Green, Edgar Moore.

Hall, William S., Lafayette College.

Hart, Edward, Lafayette College.

Moore, J. W., Lafayette College.

Peck, Frederick B., Lafayette College.

Shimer, Porter W.

ELYSBURG.

Allison, Charles E.

EMPORIUM.

Van Gelder, Arthur P., Climax Powder Mfg. Co.

ERIE.

Dunn, Ira J., 810 Peach Street.

Heisler, Chas. L., 909 North 8th Street.

FRANKLIN.

Conradson, Pontus H., Galena Signal Oil Company.

GERMANTOWN.

Beyer, T. Raymond, 119 Maplewood Avenue.

Brown, Stewardson, 20 East Penn Street.

GEOGRAPHICAL DISTRIBUTION—PA.

Carter, John E., Knox and Coulter Streets.
 Fox, Henry, 5603 Germantown Avenue.
 Haines, Reuben, Haines and Chew Streets.
 Hyde, Chas. G., 6336 Burbridge Street.
 Le Boutillier, Roberts, East Washington Avenue.

GETTYSBURG.

Stahley, George D.

GLENOLDEN.

Kinyoun, J. J.

GLENSHAW.

Shaw, Henry Clay.

GREENVILLE.

Eiesland, John, Thiel College.

Zuber, William H., 26 College Avenue.

HARRISBURG.

Jacobs, Michael William, 222 Market Street.

McCreath, Andrew S., 223 Market Street.

O'Connor, Haldeman, 13 North Front Street.

HAVERFORD.

Hall, Lyman B., Haverford College.

Strong, Reuben M., Haverford College.

HUNTINGDON VALLEY.

Bellows, Horace M.

JACOB'S CREEK.

Medsgger, Oliver P.

LANCASTER.

Gardiner, Frederic, Jr., Yeates School.

Kershner, Jefferson E.

Schiedt, Richard Conrad, Franklin and Marshall College.

LANDSDOWNE.

Macfarlane, John M.

LEBANON.

Hayes, George W.

Weimer, Edgar A., Weimer Machine Works Company.

LEMONT.

Dale, J. Y., P. O. Box 14.

LEWISBURG.

Owens, William Gundy, Bucknell University.

LINCOLN UNIVERSITY.

Miller, John Craig.

Wright, Walter Livingston, Jr.

GEOGRAPHICAL DISTRIBUTION—PA.

LOCK HAVEN.

Anagnost, Miss Lulu F., Central State Normal School.
Fleckinger, Junius R., Normal School.
Singer, George Park, 545 West Church Street.

MEDIA.

Hoopes, H. E.

MEADVILLE.

Breed, Robert S., Allegheny College.
Montgomery, James H.
Snook, H. Clyde, Allegheny College.

MILFORD.

Doughty, Mrs. Alla.

MILLERSVILLE.

Bitner, Henry F.

MINERSVILLE.

Spayd, Henry Howard.

MONONGAHELA.

Linn, Geo. A.

MOUNT JOY.

Zeigler, J. L.

MUNHALL.

Dinkey, Alva C.

MURRYSVILLE.

Stewart, Francis L.

NARBERTH.

Rotzell, W. E.

NEW WILMINGTON.

Freeman, Charles, Westminster College.

OAKMONT.

Barnsley, George Thomas.

OIL CITY.

Babcock, Charles A.
Olipphant, F. H., South Penn. Oil Co.

PENCOYD.

Christie, James.

PHILADELPHIA.

Abbott, Alexander C., University of Pennsylvania.
Albrecht, Emil Poole, 1523 North 17th Street.
Anders, Howard S., 1836 Wallace Street.
Ashbrook, Donald Sinclair, 3614 Baring Street.
Balch, Edwin Swift, 1412 Spruce Street.

Bancroft, John Sellers, 3310 Arch Street.
 Barker, G. F., 3909 Locust Street.
 Barringer, Daniel Moreau, 460 Bullitt Building.
 Beates, Henry, Jr., 1504 Walnut Street.
 Bergey, David H., Southeast corner 34th and Locust Streets.
 Biddle, James G., 1024 Stephen Girard Building.
 Blair, Andrew A., 406 Locust Street.
 Boston, L. Napoleon, 1531 South Broad Street.
 Brown, Amos Peaslee, University of Pennsylvania.
 Brown, Arthur E., 1208 Locust Street.
 Bryant, Henry G., 2013 Walnut Street.
 Burnham, George, Jr., 214 North 34th Street.
 Calvert, Philip P., University of Pennsylvania.
 Cattell, H. W., 3709 Spruce Street.
 Cohen, Solomon Solis, 1525 Walnut Street.
 Conarro, Thomas H., Hahnemann Medical College.
 Conklin, E. G., University of Pennsylvania.
 Coplin, W. M. L., Jefferson Medical College.
 Cornman, Oliver P., 2252 North 20th Street.
 Coyle, John S., St. Joseph's College, 174 Stiles Street.
 Crawley, Edwin S., University of Pennsylvania.
 Cryer, Matthew H., 1420 Chestnut Street.
 Cunningham, Francis A., 1613 Wallace Street.
 Currie, C. A., P. O. Box 1606.
 d'Aurià, Luigi, 972 Drexel Building.
 de Benneville, James S., University Club.
 Dixon, Samuel Gibson, 1900 Race Street.
 Downs, Norton, 215 West Walnut Lane, Germantown.
 Duane, Russell, Real Estate Trust Building.
 Du Bois, Howard Weidner, 4526 Regent Street.
 Du Bois, Patterson, 401 South 40th Street.
 Dulles, Charles W., 4101 Walnut Street.
 Ehrenfeld, Frederick, University of Pennsylvania.
 Ely, Theodore N., Pennsylvania R.R., Broad Street Station.
 Fahrig, Ernst, Philadelphia Commercial Museum.
 Fisher, George Egbert, University of Pennsylvania.
 Fisher, S. Wilson, 1502 Pine Street.
 Flexner, Simon, University of Pennsylvania.
 Foote, Warren M., 1317 Arch Street.
 Frazer, Persifor, Drexel Building, Room 1042.
 Genth, Frederick A., 103 North Front Street.
 Gildersleeve, Nathaniel, University of Pennsylvania.
 Goldsmith, Edward, 658 North 10th Street.
 Goode, John Paul, University of Pennsylvania.
 Goodspeed, Arthur Willis, University of Pennsylvania.

GEOGRAPHICAL DISTRIBUTION—PA.

Gould, George Milbry, 1631 Locust Street.
Hance, Anthony M., 2024 De Lancey Place.
Harrah, C. J., P. O. Box 1606.
Harris, J. Campbell, 119 South 16th Street.
Hart, Joseph Hall, University of Pennsylvania.
Harte, Richard H., 1503 Spruce Street.
Harvey, William Stecker, 119 South 4th Street.
Haupt, Lewis M., 107 North 35th Street.
Heilprin, Angelo, Academy Natural Sciences.
Hexamer, C. John, 419 Walnut Street.
Hitchcock, Miss Fanny R. M., 4038 Walnut Street.
Holmes, Miss Mary S., 1331 12th Street.
Humphrey, Richard L., City Hall.
Ingham, William A., 320 Walnut Street.
Ives, Frederick E., 2750 North 11th Street.
Jack, Louis, 1533 Locust Street.
Jayne, Horace, 318 South 19th Street.
Johnson, Chas. Wallison, Wagner Free Institute of Science.
Knauff, Francis Henry, Oak Lane.
Kraemer, Henry, 145 North 10th Street.
Landis, Edward Horace, Central High School.
Lathbury, B. Brentnall, 1619 Filbert Street.
Lazell, Ellis W., 1619 Filbert Street.
LeConte, Robert Grier, 1625 Spruce Street.
Lee, Benjamin, 1420 Chestnut Street.
Lee, Waldemar, 4620 Wayne Street.
Leeds, Morris E., 3221 North 17th Street.
Leidy, Joseph, Jr., 1319 Locust Street.
Leonard, Charles Lester, 112 S. 20th Street.
Lewis, Wilfred, 5901 Drexel Road.
Lightfoot, Thomas Montgomery, Central High School.
Lyman, Benjamin Smith, 708 Locust Street.
McCurdy, Charles W., 724 Real Estate Trust Building.
McFarland, Joseph, 442 West Stafford Street.
Makuen, G. Hudson, 1419 Walnut Street.
Marks, William D., "The Art Club."
Meehan, S. Mendelson, Germantown.
Mellor, Alfred, 2130 Mt. Vernon Street.
Meyer, John Franklin, University of Pennsylvania.
Milne, David, 2030 Walnut Street.
Mohr, Charles, Hahnemann Medical College and Hospital.
Moore, Clarence B., 1321 Locust Street.
Nolan, Edward J., Academy Natural Sciences.
Olsen, Tinius, 500 North 12th Street.
Ortmann, Arnold E., Carnegie Museum.

Parker, J. B., United States Naval Home.
 Patterson, James L., Chestnut Hill.
 Pawling, Jesse, Jr., University of Pennsylvania.
 Peirce, Cyrus N., 3316 Powelton Avenue.
 Peirce, Harold, 222 Drexel Building.
 Pennington, Miss Mary Engle, 3908 Walnut Street.
 Penrose, Charles B., 1720 Spruce Street.
 Penrose, R. A. F., Jr., 460 Bullitt Building.
 Pétre, Axel, P. O. Box 1606.
 Philips, Ferdinand, 505 N. 21st Street.
 Piersol, George A., University of Pennsylvania.
 Randall, Burton Alexander, 1717 Locust Street.
 Reed, Charles J., 3313 North 16th Street.
 Reckefus, Chas. H., Jr., 506 North 6th Street.
 Reese, Jacob, 400 Chestnut Street.
 Riesman, David, 326 South 16th Street.
 Ritchie, Craig D., 414 North 34th Street.
 Rorer, Jonathan T., Central High School.
 Rosenthal, Edwin, 517 Pine Street.
 Sadtler, Samuel P., N.E. corner 10th & Chestnut Streets.
 Schaffer, Charles, 1309 Arch Street.
 Schaffer, Mrs. Mary Townsend Sharpless, 1309 Arch Street.
 Schwatt, Isaac Joachim, University of Pennsylvania.
 Seal, Alfred Newlin, Girard College.
 Sellers, William, 1600 Hamilton Street.
 Skinner, Henry, 716 North 20th Street.
 Smith, Allen J., University of Pennsylvania.
 Smith, Edgar F., University of Pennsylvania.
 Smith, Joseph R., 2300 De Lancey Street.
 Snyder, Monroe B., Philadelphia Astronomical Observatory.
 Steinbach, Lewis W., 1309 North Broad Street.
 Stellwagen, Thos. C., 1328 Chestnut Street.
 Stewart, Ralph Chambers, 1031 Spruce Street.
 Stradling, George F., 4114 Parkside Avenue.
 Thomas, Lancaster, 1932 Mt. Vernon Street.
 Thomson, William, 1426 Walnut Street.
 Turner, Arthur Bertram, Temple College.
 Tyson, James, 1506 Spruce Street.
 Vaux, George, Jr., 404 Girard Building.
 Walter, Miss Emma, 109 North 16th Street.
 Warder, Charles Barclay, 1715 Walnut Street.
 Wardle, Harriet N., 125 North 10th Street.
 Weaver, Gerrit E. Hambleton, 916 Farragut Terrace.
 Welsh, Francis Ralston, 328 Chestnut Street.
 Wetherill, Henry Emerson, 3734 Walnut Street.

GEOGRAPHICAL DISTRIBUTION—PA.

Whitfield, J. Edward, 406 Locust Street.
Wille, Henry Valentin, 2600 Girard Avenue.
Wilson, William Powell, 233 South 4th Street.
Witmer, Lightner, University of Pennsylvania.
Wolfel, Paul L., N.W. cor. 15th & Chestnut Streets.
Wood, Stewart, 400 Chestnut Street.
Wood, Walter, 400 Chestnut Street.
Woodbury, Frank, 218 South 16th Street.

PHOENIXVILLE.

Deans, John S., Phoenix Bridge Company.

PITCAIRN.

Beatty, James W. F.

PITTSBURG.

Allyn, G. W., 515 Penn Avenue.
Anderson, J. Hartley, 4630 5th Avenue.
Asdale, Wm. J., Western Pennsylvania Medical College.
Baggaley, Ralph.
Bennett, Edward, Amber Club.
Bland, John C., 1003 Penn Avenue.
Buchanan, James I., 6108 Walnut Street.
Coster, Wm. H., Department of Public Works.
Crawford, David Francis, Union Station.
Daggette, Alvin S., 400 South Craig Street.
Dempster, Alexander, Stanton and Euclid Avenues.
Ely, Sumner B., Vandergrift Building.
English, William Thompson, Western University of Pennsylvania.
Falconer, William, Schenley Park.
Finley, Norval H., 6638 Deary Street.
Fisher, Henry Wright, S. U. Cable Company.
Hailman, James D., Shady Avenue.
Hatcher, John Bell, Carnegie Museum.
Herron, John Brown, South Linden Avenue, E. E.
Holland, W. J., Carnegie Museum.
Kahl, Paul H. I., Carnegie Museum.
Kann, Myer M., Station B.
Kay, James I., 426 Diamond Street.
Keller, Emil E., P. O. Box 452.
Kirk, Arthur, 910 Duquesne Way.
Knowles, Morris, 1017 Frick Building.
Koenig, Adolph, 122 9th Street.
Lange, Philip A., Westinghouse Electric and Mfg. Company.
Lauder, George, 7403 Penn Avenue.
Lincoln, Paul M.
Litchfield, Lawrence, 5431 Fifth Avenue.

GEOGRAPHICAL DISTRIBUTION—PA.

Macbeth, George A.
McClelland, James H., 5th and Wilkins Avenues.
Macfarlane, James R., Academy of Science and Art.
McKelvy, William H., 420 6th Avenue.
Mellor, Charles C., 319 5th Avenue.
Metcalf, Orlando, 424 Telephone Building.
Metcalf, William, 1 Fulton Street.
Negley, Henry Hillis, 600 North Negley Avenue.
Nicola, Frank F., cor. Wood Street and 6th Avenue.
Osborne, Loyal Allen, Westinghouse Electric and Mfg. Company.
Phipps, Lawrence C., Farmers' Bank Building.
Porter, Henry K., 541 Wood Street.
Potter, William Plumer, 304 St. Clair Street.
Reed, James H., Amberson Avenue.
Roberts, Thomas Paschall, 361 North Craig Street.
Ross, F. G., Farmers' Bank Building.
Sanes, K. I., 1636 5th Avenue.
Scaife, William L., 28th Street.
Scott, Charles F., Westinghouse Electric and Mfg. Company.
Shaw, Wilson A., Norwood Avenue, cor. Forbes Avenue.
Stewart, Douglas, Carnegie Museum.
Storer, Norman W., 6109 Howe Street.
Swensson, Emil, 5511 Hays Street.
Taylor, Edward B.
Thaw, Benjamin, Morewood Place.
Thaw, Mrs. William, Box 1086.
Tonnele, Theodore, 919 College Avenue.
Van Valkenburg, Hermon L., Amber Club.
Wardlaw, George A., Amber Club.
Webster, Frederick S., Carnegie Museum.
Westinghouse, George.
Wilkins, William G., Westinghouse Building.
Wurts, Alexander Jay, Garrison Alley and Fayette Street.

PITTSBURGH.

Berry, John Wilson.

POTTSVILLE.

Sheafer, A. W.

READING

Bryson, Andrew, Brylgon Foundry.
Mengel, Levi W., Boys' High School.

RIDGWAY.

Williams, J. C., Orchard Street.

ROCKLAND.

Taylor, J. Erskine.

SCRANTON.

Boies, Henry Martyn, 530 Clay Avenue.

Clark, John Jesse, International Correspondence Schools.

Kay, Thomas Wiles, 345 Wyoming Avenue.

Richmond, William Henry, 3425 North Main Avenue.

Scharar, Christian H., 2073 North Main Avenue.

SHARPSVILLE.

West, Thomas Dyson, T. D. West Engraving Co.

SMETHPORT.

Scull, Miss Sarah A.

SOUTH BETHLEHEM.

Barrell, Joseph, Lehigh University.

Cleaver, Albert M.

Drown, Thomas M., Lehigh University.

Franklin, William S., Lehigh University.

Frazier, B. W., Lehigh University.

Irving, John D., 440 Seneca Street.

MacNutt, Barry, Lehigh University.

Merriman, Mansfield, Lehigh University.

Sayre, Robert H.

Schober, Wm. Bush, Lehigh University.

Thomburg, Charles L., Lehigh University.

STATE COLLEGE.

Armsby, Henry Prentiss.

Buckhout, W. A.

Clark, Friend E.

Frear, William.

Osmond, I. Thornton.

Pond, G. Gilbert.

Surface, H. A.

Wadsworth, M. Edw.

SWARTHMORE.

Alleman, Gellert, Swarthmore College.

Cunningham, Susan J., Swarthmore College.

Hoadley, George A., Swarthmore College.

Stine, W. M., Swarthmore College.

UNIONTOWN.

Kennedy, Orran W., Frick Coke Company.

GEOGRAPHICAL DISTRIBUTION—PA.

UPPER DARBY.

Doolittle, C. L.

VANDERGRIFT.

Pinkerton, Andrew.

VILLA NOVA.

Morris, F. W.

WARREN.

Guth, Morris S., Milwaukee County Hospital.

Jefferson, J. P.

Lindsey, Edward.

Quinn, John James.

WASHINGTON.

Linton, Edwin, Washington and Jefferson College.

McAdam, D. J., Washington and Jefferson College.

WAYNESBURG.

Turner, Archelaus E., Waynesburg College.

Waychoff, Andrew J., Waynesburg College.

WEST CHESTER.

Cochran, C. B., 514 South High Street.

Farquhar, Miss Helen, Normal School.

Wagner, Samuel, Greenbank Farm.

WEST FAIRVIEW.

Bashore, Harvey B.

WILKENSBURG.

Downs, Edgar Selah, 704 Trenton Avenue.

Grant, Willis Howard, 744 South Avenue.

Newell, Frank Clarence, 434 Rebecca Avenue.

WILKES-BARRE.

Dean, William H., 167 West River Street.

Ricketts, R. Bruce.

Taylor, Lewis H., 83 South Franklin Street.

WILMERDING.

Westinghouse, Henry Herman.

WYNCOTE.

Crawley, Howard.

YORK.

Wanner, Atreus.

PHILIPPINE ISLANDS.

CAVITE.

Winterhalter, A. G., Naval Station.

MANILA.

Folkmar, Daniel, care Civil Service.

Hager, Albert R., Manila Normal School.

Jenks, Albert E., Bureau of Non-Christian Tribes.

McCauley, C. A. H.

Mearns, Edgar A.

Merrill, Elmer D., Insular Bureau of Agriculture

Russell, A. H.

Thomas, Jerome B., care of Chief Surgeon.

Worcester, Dean C.

OLONGAPO.

Harris, Uriah R., U. S. Naval Station.

PORTO RICO.

PONCE.

Domenech, Manuel V., Lock Box 220.

SAN JUAN.

Berkeley, William N., Box 65.

West, Max, care Treasury Department.

RHODE ISLAND.

HOWARD.

Keene, George F.

KINGSTON.

Barlow, John, College of Agriculture.

Card, Fred. W., College of Agriculture.

Merrow, Miss Harriet L., College of Agriculture.

LONSDALE.

Bartlett, John R.

MATUNUCK.

Matlack, Charles, "Hidden Hearth."

NEWPORT.

Emmons, Arthur B.

Gibbs, Wolcott.

Tiffany, Lyman, 54 Kay Street.

Wheatland, Marcus F., 84 Johns Street.

PEACE DALE.

Hazard, Rowland G.

PROVIDENCE.

Adams, Frederick C., Classical High School.
 Appleton, John Howard, Brown University.
 Barus, Carl, Wilson Hall, Brown University.
 Blanchard, Arthur Horace, Brown University.
 Catlin, Charles A., 133 Hope Street.
 Delabarre, E. B., 9 Arlington Avenue.
 Hill, John Edward, Brown University.
 Lowell, Russell C., 167 Ohio Avenue.
 Marlatt, Miss Abby L., Manual Training High School.
 Mead, A. D., Brown University.
 Miller, Horace George, 189 Bowen Street.
 Packard, A. S., 115 Angell Street.
 Palmer, Albert De Forest, Brown University.
 Slocum, Frederick, Ladd Observatory.
 Tilley, Charles Edward, Hope Street High School.
 Upton, Winslow, Ladd Observatory.
 Weed, Alfred, care Nicholson File Company.
 Williams, Leonard Worcester, Brown University.
 Woodward, William Carpenter, 5 Charles Field Street.

WOONSOCKET.

Marble, Miss Sarah.

SOUTH CAROLINA.

AIKEN.

McGahan, Chas. F.

CHARLESTON.

Ashley, George H., College of Charleston.
 Holmes, Morrison A., Avery Normal Institute.

CLEMSON COLLEGE.

Barnes, Albert.
 Brackett, Richard N.
 Brodie, Paul T.
 Chambliss, Charles E.
 Lewis, Joseph Volney.
 McDonnell, Curtis C.
 Mell, P. H.
 Metcalf, Haven.
 Riggs, Walter M.
 Waller, Coleman B.

LUGOFF.

Burdell, W. J.

SPARTANBURG.

Knox, Francis H.

SOUTH DAKOTA.

BRITTON.

Jewett, Geo. Franklin.

BROOKINGS.

Chilcott, Ellery C., Agricultural College.

Heston, John W., Agricultural College.

DEADWOOD.

Torrence, William W., 649 Main Street.

HURLEY.

Ellis, Robert W.

MADISON.

Norton, A. Wellington.

MITCHELL.

Fulmer, Edward Lawrence, Dakota University.

RAPID CITY.

Hartgering, James.

McLaury, Howard L., School of Mines.

O'Hara, Cleophas Cisney, School of Mines.

Slagle, Robert Lincoln.

REDFIELD.

Arnold, Jacob H., Redfield College.

ROSEBUD.

Scovel, Edward C.

SIOUX FALLS.

Peabody, Mary Brown, All Saints School.

TEA.

Béndrat, Thomas A.

VERMILLION.

Akeley, Lewis E., State University.

Droppers, Garrett, State University.

Todd, James E., State University.

TENNESSEE.

CHATTANOOGA.

Anderson, Edwin Clinton, 726 Market Street.

KNOXVILLE.

Bain, Samuel M., University of Tennessee.

Claxton, P. P., University of Tennessee.

GEOGRAPHICAL DISTRIBUTION—TENN.—TEX.

Dabney, Charles W., University of Tennessee.
Fulton, Weston Miller, University of Tennessee.
Perkins, Charles Albert, University of Tennessee.
Wait, Charles E., University of Tennessee.

LEBANON.

Waterhouse, James Smartt, Cumberland University.

MEMPHIS.

Cook, James B., Randolph Building.
Sinclair, Alexander Grant, Memphis Hospital Medical College.

NASHVILLE.

Buist, John Robinson.
Daniel, John, Vanderbilt University.
Dudley, William L., Vanderbilt University.
Glenn, L. C., Vanderbilt University.
Hollinshead, Warren H., Vanderbilt University.
Jones, Grinnell, Vanderbilt University.
Kirk, Elliott W., Wesley Hall.
McGill, John T., Vanderbilt University.
Martin, George W., Vanderbilt University.
Thruston, Gates Phillips.

SEWANEE.

Barton, Samuel M., University of the South.
Hall, William Bonnell, University of the South.
Quintard, Edward A.

TEXAS.

AUSTIN.

Bray, William L., University of Texas.
Ellis, Alexander C., University of Texas.
Ferguson, Alexander McGowan, University of Texas.
Harper, Henry Winston, University of Texas.
Lowber, James William, 113 East 18th Street.
Mezes, Sidney Edward, University of Texas.
Pearce, James Edwin, 309 West 10th Street.
Prather, William L., 1914 Nueces Street.
Rucker, Miss Augusta, University of Texas.
Simonds, Frederic W., University of Texas.
Smith, Matthew Mann.
Smith, Q. Cincinnatus, 617 Colorado Street.
Wooten, J. S.

GEOGRAPHICAL DISTRIBUTION—TEX.

BELTON.

Wells, Eliab Horatio, Baylor Female College.

BRUNNER.

Fuller, Arthur Levens.

COLLEGE STATION.

Nagle, James C., Agricultural and Mechanical College.

Ness, Hege, Agricultural and Mechanical College.

Puryear, Chas., Agricultural and Mechanical College.

Sanderson, E. Dwight, Agricultural and Mechanical College.

Tilson, P. S., Agricultural and Mechanical College.

COLUMBUS.

Harrison, Robert Henry.

Simpson, Friench, Jr.

CORPUS CHRISTI.

Spohn, Arthur Edward.

DALLAS.

Hasic, Montague S.

Smith, J. F., Commercial College.

DENISON.

Munson, T. V.

DENTON.

Long, William H., Jr.,

EL PASO.

Mellish, Ernest Johnson

FORT WORTH.

Chase, Ira Carleton.

Heller, Napoleon B., Fort Worth University.

GALVESTON.

Dudgeon, H. R., School of Medicine, University of Texas.

Jones, Charles C.

Thompson, James Edwin, 3224 Broadway.

GARRISON.

Matly, Frederick W.

GRAHAM.

Le Grand, Leroy.

HEMSTEAD.

Montgomery, Edmund.

HILLSBORO.

Thompson, Benj., T. & B. V. Ry. Co.

HOUSTON.

Daviss, Edward P., 205-6 Binz Building.

Dumble, E. T., 1708 Prairie Avenue.

GEOGRAPHICAL DISTRIBUTION—TEX.

McLaughlin, A. C., Houston Oil Co., of Texas.
Red, Samuel Clark.
Tompkins, Stonewall, 1013 Franklin Avenue.

HUNTSVILLE.

Coleman, Walter, Sam Houston Normal Institute.
Halley, Robert Burns, Sam Houston Normal Institute.

McKINNEY.

Curtis, George W.

LLANO.

Smith, James Edward.

ORANGE.

Saunders, James, Lock Box 147.

PRAIRIE VIEW.

Blackshear, Edward Levoisier.

ROGERS.

Thomas, George T.

SAN ANTONIO.

Brackenridge, George W.
Braunnagel, Jules L. A., P. O. Box 925.

STEPHENVILLE.

Boon, John Daniel.

TEMPLE.

Miller, Pleasant T., 816 North 9th Street.

TEXARKANA.

Sheppard, Morris.

VICTORIA.

Crouse, Hugh Woodward.
Smith, Felix Ezell.

WACO.

Carroll, James J.
Cole, W. F.

WHITEWRIGHT.

Butler, Frank Edward, Grayson College.

WOLFE CITY.

Holstein, George W.

YOAKUM.

Shropshire, Walter.

UTAH.

LOGAN.

Ball, Elmer D., Agricultural Experiment Station.
Kerr, Wm. J., Agricultural College.
Linford, James Henry, The Brigham Young College.

MODENA.

Kimball, James H., U. S. Bureau.

SALT LAKE CITY.

Anderson, Frank, 255 2d East Street.
Fisher, Robert Welles, 159 East 2d South Street.
Garrett, Albert O., 1242 Milton Avenue.
Howard, Orson, University of Utah.
Jenney, Walter Proctor, Kuntsford Hotel.
Jones, Marcus E.
Merrill, Joseph Francis, University of Utah.
Reynolds, George, P. O. Box B.
Talmage, James Edward, University of Utah.
Tiernan, Austin K., P. O. Box 441.

SUNSHINE.

Stackpole, Morrill D.

VERMONT.

BRATTLEBORO.

Holton, Henry D.

BURLINGTON.

Butterfield, Arthur Dexter, University of Vermont.
Freedman, William Horatio, University of Vermont.
Jones, Lewis Ralph, University of Vermont.
Morse, Warner Jackson, University of Vermont.
Perkins, George H.
Perkins, Henry F., University of Vermont.
Stuart, William, University of Vermont.
Taft, Elihu B.
Votey, J. William, University of Vermont.

JOHNSON.

Ham, Judson B., State Normal School.

MIDDLEBURY.

Burt, Edward Angus, Middlebury College.

NASHVILLE.

Bentley, Wilson A.

RUTLAND.

Francisco, M. Judson, 49 Merchants' Row.

SAINT JOHNSBURY.

Fairbanks, Henry.

SPRINGFIELD.

Hartness, James, Jones & Lamson Machine Company.

VIRGINIA.

ALEXANDRIA.

O'Brien, Matthew Watson, 908 Cameron Street.

BIG STONE GAP.

Hodge, James M.

BLACKSBURG.

Alwood, William B., Virginia Polytechnic Institute.

Davidson, R. J., Virginia Polytechnic Institute.

Phillips, John Lloyd, Virginia Polytechnic Institute.

Price, Harvey Lee, Virginia Polytechnic Institute.

Pritchard, Samuel Reynolds, Virginia Polytechnic Institute.

Randolph, L. S., Virginia Polytechnic Institute.

BLACKSTONE.

Fishburne, Edward B., Jr.

CHARLOTTESVILLE.

Dunnington, F. P., University of Virginia.

Jones, Ernest S., University of Virginia.

Mallett, J. W., University of Virginia.

Stone, Ormond, University of Virginia.

Tuttle, Albert H., University of Virginia.

COLLEGE PARK.

Martin, F. W., Randolph-Macon Women's College.

EMORY.

Miller, James Shannon, Emory and Henry College.

FARMVILLE.

Jarman, Joseph L., State Female Normal School.

FREDERICKSBURG.

Richardson, William D., P. O. Box 185.

HAMPDEN-SIDNEY.

Bagby, J. H. C., Hampden-Sidney College.

HAMPTON.

Frissell, Hollis B., Hampton Institute.

HOLLINS.

Duke, Frank Williamson, Hollins Institute.

LEXINGTON.

Campbell, Henry Donald, Washington and Lee University.

Howe, James Lewis, Washington and Lee University.

Stevens, W. LeConte, Washington and Lee University.

LONG'S SHOP.

Price, Robert H., Willow View Farm.

NEWPORT NEWS.

Hopkins, Albert L., 2904 West Avenue.

Post, Walter A., Newport News Shipbuilding and Drydock Co.

OLD POINT COMFORT.

Fessenden, Reginald A.

Freeland, Frederick K., The Sherwood.

RICHMOND.

Garcin, Ramond D., 2618 East Broad Street.

Hunter, Joseph Rufus, Richmond College.

Johnston, Geo. Ben., 407 East Grace Street.

Magruder, Egbert W., Department of Agriculture.

Valentine, Edward P.

ROANOKE.

Davis, Wm. W., Va. Iron, Coal and Coke Company.

Engle, Horace M.

Mueller, Edward.

SALTVILLE.

Mount, William D., Mathieson Alkali Works.

WASHINGTON.

MOUNT VERNON.

Waugh, James Church.

PULLMAN.

Landes, Henry.

Shedd, Solon.

SEATTLE.

Brainerd, Erastus.

Eagleson, James B., 512 Burke Building.

Johnson, Charles W., University Station.

Millis, John, U. S. Engineer's Office.

Roberts, Milnor, University of Washington.

Shelton, Edward M., 2904 Franklin Avenue.

SPOKANE.

Burbidge, Frederick, 510 Empire State Building.
McMullen, Joseph F., 1908 Nora Avenue.

STARBUCK.

Pietrzycki, Marcel.

TACOMA.

Gault, Franklin B., 602 North I Street.

WEST VIRGINIA.

ATHENS.

Goodwin, Elmer Forrest, State Normal School.

BOOMER.

Sharp, Charles Cutler, Raven Coal and Coke Company.

CHARLESTON.

Cargill, George W.

CLARKSBURG.

Davis, John J.
Smith, Harvey F.

FAIRMONT.

Sands, Wm. Hupp.

MARTINSBURG.

McCune, M. Virginia, 506 West John Street.

MORGANTOWN.

Brock, Luther S.
Brown, Samuel B.
Fast, Richard Ellsworth, West Virginia University.
Hennen, Ray V., L. B. 448.
Hodges, Thomas Edward, West Virginia University.
Johnson, Thomas Carskadon, 375 Spruce Street.
Johnston, John Black, West Virginia University.
Jones, Clement Ross, West Virginia University.
Maxwell, Hu.
Morris, Russell Love, West Virginia University.
Sheldon, John Lewis, Agricultural Experiment Station.
Stewart, James H., Agricultural Experiment Station.
White, I. C., West Virginia University.
Witham, William Henry, West Virginia University.

PHILIPPI.

Lemley, C. McC.

WAVERLY.

Brooks, Earle Amos.

WHEELING.

Crockard, Frank Hearne, Lock Box 34.

WISCONSIN.

BELOIT.

Smith, Erastus G., Beloit Sanitary Laboratory.

Smith, Thomas A., Beloit College.

DEHAVAN.

Walker, E. W., State School for the Deaf.

FOND DU LAC.

Molitor, David, 125 Park Avenue.

GREEN BAY.

Schuette, J. H.

KENOSHA.

Windesheim, Gustave, 255 Main Street.

MADISON.

Babcock, S. Moulton, 432 Lake Street.

Birge, Edward A., University of Wisconsin.

Bull, Storm.

Cheney, Lellen Sterling, 318 Bruen Street.

Clements, Julius Morgan, University of Wisconsin.

Comstock, George C., University of Wisconsin.

Flint, Albert S., Washburn Observatory.

Frost, William Dodge, University of Wisconsin.

Goff, E. S., 1113 University Avenue.

Hastings, Edwin George, Agricultural Experiment Station.

Hillyer, Homer W., University of Wisconsin.

Hobbs, William Herbert.

Jastrow, Joseph, University of Wisconsin.

Kahlenberg, Louis, University of Wisconsin.

Kremers, Edward, University of Wisconsin.

Lenher, Victor, University of Wisconsin.

Longden, A. C., Wisconsin Avenue.

Mendenhall, Charles E., University of Wisconsin.

Miller, William S., University of Wisconsin.

Russell, H. L., University of Wisconsin.

Slichter, Charles S., University of Wisconsin.

Snow, Benjamin W., 518 Wisconsin Avenue.

Trowbridge, Augustus, University of Wisconsin.

Turneure, Frederic E., University of Wisconsin.

Van Hise, Charles R., University of Wisconsin.

Wagner, George.

Woll, Fritz Wilhelm.

GEOGRAPHICAL DISTRIBUTION—WIS.

MENOMONIE.

Davis, Kary Cadmus.

MILTON.

Daland, William Clifton.

MILWAUKEE.

Albrecht, Sebastian, 767 Forest Home.
Beach, William Harrison, 229 Pleasant Street.
Becher, Franklin A., 234 Oneida Street.
Case, Ermine Cowles, State Normal School.
Conway, George M., 10 Belvedere.
Friend, Samuel Henry, 141 Wisconsin Street.
Kletzsch, Gustav A., 453 Cass Street.
Mitchell, Andrew S., 220 Greenbush Street.
Neilson, Walter Hopper, 114 Garfield Avenue.
Nolte, Lewis G., Senn's Block.
Ogden, Henry Vining, 141 Wisconsin Street.
Sherman, Lewis, 448 Jackson Street.
Stickney, Gardner P., care Oliver C. Fuller & Company.
Uihlein, August, 332 Galena Street.
Ward, Henry L., Public Museum.
Wright, Clement Blake Bergen, 796 Astor Street.

NORTH FREEDOM.

LaRue, William Gordon.

OCONOMOWOC.

Voje, John Henry, Private Sanatorium, Waldheim.

RACINE.

Davis, J. J., 1119 College Avenue.

RIPON.

Chandler, Charles Henry.
Marsh, C. Dwight, Ripon College.

WAUWATOSA.

Grosskopf, Ernest C., Milwaukee County Hospital.

WILLIAMS BAY.

Barnard, Edward E., Yerkes Observatory.
Frost, Edwin Brant, Yerkes Observatory.
Hale, George E., Yerkes Observatory.
Reese, Herbert M., Yerkes Observatory.
Schlesinger, Frank, Yerkes Observatory.

WYOMING.

BUFFALO.

Onderdonk, Henry U.

CASPER.

Salathé, Frederick, Penna. Oil and Gas Company.

CHEYENNE.

Bond, Fred.

Morris, Robert C., Clerk of Wyoming Supreme Court.

FOUR BEAR.

Pickett, William Douglas.

LARAMIE.

Buffum, Burt C.

Nelson, Aven, University of Wyoming.

Slosson, Edwin E., University of Wyoming.

RAWLINS.

Carter, James.

SHERIDAN.

Coffeen, H. A.

SHOSHONE AGENCY.

Ramsey, Miss Mary C.

FOREIGN.

BRAZIL.

SAO PAULO.

Derby, Orville A.

Lane, Horace Manley, Caixa 14.

von Ihering, F., Museu Paulista.

BRITISH COLUMBIA.

ROSSLAND.

Thompson, William, Rossland Great Western Mines, Limited.

VICTORIA.

Sutton, William J.

CANADA.

ACTON VALE.

Würtele, John Hunter.

Würtele, Louis C.

BARRIE.

Hunter, Andrew Frederick.

GEOGRAPHICAL DISTRIBUTION—CANADA.

CHATHAM.

Macfarlanè, A., Gowrie Grove.

DAWSON.

Tyrrell, Joseph B.

FREDERICTON.

Riley, Isaac Woodbridge.

GUELPH.

Doherty, Manning W., Ontario Agricultural College.

Lochhead, William, Ontario Agricultural College.

Mills, James, Ontario Agricultural College.

HALIFAX.

Murray, Daniel A., Dalhousie College.

LINDSAY.

Cornish, George A.

LONDON.

Bethune, C. J. S., 500 Dufferin Avenue.

MONTREAL.

Burgess, Thomas J. W., Protestant Hospital for the Insane.

Butler, Matthew J., 877 Dorchester Street.

Cox, John, McGill University.

Holt, Herbert S., Montreal Light, Heat and Power Company.

Iles, George, 5 Brunswick Street.

Lampard, Henry, 102 Shuter Street.

Loeb, Leo, McGill University.

Lyman, Henry H., 74 McTavish Street.

Mills, Wesley, McGill University.

Schenck, Charles C., McGill University.

Walls, John Abbet, 1724 Notre Dame Street.

OTTAWA.

Bell, Robert, Geological Survey.

Fletcher, James, Experimental Farm.

Harmon, Miss A. Maria, 171 McLaren Street.

Klotz, Otto Julius, 437 Albert Street.

Saunders, Charles E., Experimental Farm.

Saunders, William, Experimental Farm.

Shutt, Frank T., Experimental Farm.

Whiteaves, J. F., Geological Survey.

QUEBEC.

Laflamme, J. C. K., Laval University.

STANSTEAD.

Moore, Mrs. A. H.

TORONTO.

Galbraith, John, School of Practical Science.
James, Charles C., Department of Agriculture.
Kammerer, Jacob Andrae.
Kirschmann, A., Toronto University.
McCurdy, Arthur W., 143 Bloor Street, West.
McLennan, J. C., Toronto University.
Spencer, J. William, 152 Bloor Street.
Walker, Byron Edmund.

ENGLAND.

LAMPETER.

Scott, Arthur William, St. David's College.

LONDON.

Hoover, Herbert C., care Bewick, Morring & Co., Broad Street
House, New Broad Street.
Peters, Edw. T., 81 Constantine Road, Hampstead, N. W.
Power, Frederick B., 6 King Street, Snow Hill, E. C.
Wells, Wm. H., Jr., 2 Norfolk Street, Strand, W. C.

OXFORD.

Myres, John L., Christ Church.

ROTHAMSTED.

Warington, Robert.

FRANCE.

MENTON.

Allis, Edward Phelps, Jr., Palais Carnolès.

PARIS.

Loubat, Le Duc De, 47 rue Dumont d'Urville.

GERMANY.

BERLIN.

Hoffmann, Friedrich, Charlottenburg, Kant Street 125.

BONN.

Miyake, Küchi, Botanisches Institut, Universität zu Bonn.

HUNGARY.

BUDAPEST.

Krécsy, Béla, vi Bulyovszky u. 22.

GEOGRAPHICAL DISTRIBUTION--ITALY--MEXICO.

ITALY.

SAN REMO.

Kuntze, Otto, Villa Girola.

JAPAN.

KOBE.

Hoyt, Olive Sawyer, Kobe College.

TOKYO.

Loew, Oscar.

YOKOHAMA.

Gause, Fred. Taylor.

MEXICO.

AGUASCALIENTES.

Morse, Willard S.

CEDRAL.

Alexander, Curtis.

CITY OF MEXICO.

de Arozarena, Rafael M., 2 da Calle de las Estaciones.

Delafond, E., P. O. Box 2290.

Hard, James M. B., Cordobanes 16.

Sercombe, Parker H., 1a Calle San Francisco No. 8.

COLIMA.

Herbert, Arthur P.

CORDOBA.

Bowman, Joseph H.

COYOACAN, D. F.

Nuttall, Mrs. Zelia, Casa Alvarado.

GUADALAJARA

Schiaffino, Mariano L.

GUADALUPE Y CALVO

Schiertz, Ferdinand A.

JALAPA.

Gutierrez, Manuel R.

LINARES.

McLimont, Andrew W.

MONCLOVA.

Cerna, David.

MONTEREY.

Dysterud, E.

PACHUCA.

De Landero, Carlos F.

GEOGRAPHICAL DISTRIBUTION—MEXICO—WESTERN AFRICA.

SALTILLO.

Abbott, Theodore Sperry.
Burton, Standish B.

SAN JOSE DE GRACIA.

Tays, Eugene A. H., Anglo-Mexican Mining Company.

SAN NICOLAS DEL ORO.

Miller, Henry Huntington.

SOMBRERETE.

McMahan, Charles Hays.

TORRES.

Peterson, Bertel.

VERA CRUZ.

Parker, Herman B.

VILLA CORONA.

Carnaghan, Edwin D.

NICARAGUA.

LEON.

Crawford, John.

SICILY.

CATANIA.

Scaife, Walter B., care A. W. Elford.

SOUTH AFRICA.

CAPE TOWN.

Gilchrist, John D., Department of Agriculture.
Lounsbury, Charles P., Department of Agriculture.
Mally, Charles William, Department of Agriculture.

PRETORIA.

Davy, Joseph Burt, Department of Agriculture.
Simpson, Charles Baird, Department of Agriculture.

TURKEY.

HARPUT.

Norton, Thomas H., United States Consulate.

WESTERN AFRICA.

NIGERIA.

McDermott, P. A., Roman Catholic Mission, Old Calabar.

DECEASED MEMBERS.

DECEASED MEMBERS.

[A list of deceased members of the Association, so far as known at the time of publishing the volume of Proceedings of the Springfield meeting, May, 1896, is given in that volume. At the Buffalo meeting the Council directed the Permanent Secretary to omit the printing of the full list of deceased members in the annual volumes and to print only the additions to the list. Since the publication of the list printed in the Washington Proceedings (Vol. 52) notices have been received of the decease of the following members.]

Abbot, Francis Ellingwood, 43 Larch Road, Cambridge, Mass. (50). Died October 23, 1903.

Abert, S. Thayer, Metropolitan Club, Washington, D. C. (30).

BOLTON, H. CARRINGTON, Cosmos Club, Washington, D. C. (17).
Died November 19, 1903.

Clancy, Michael Albert, 1426 Corcoran St., Washington, D. C. (40).

Cranford, J. P., Wakefield, New York, N. Y. (50). Died January 28, 1903.

Day, Fisk H., 309 Sycamore St., Lansing, Mich. (20). Died May 30, 1903.

Douglass, Andrew E., Am. Mus. Nat. History, New York, N. Y. (31).

Gibbs, J. Willard, New Haven, Conn. (33). Died April 28, 1903.

Grimes, James Stanley, 1422 Wesley Ave., Evanston, Ill. (17).
Died September 27, 1903.

Jesup, Henry G., Dartmouth College, Hanover, N. H. (36).

Kedzie, John H., 1514 Ridge Ave., Evanston, Ill. (34).

Magee, James Francis, 114 N. 17th St., Philadelphia, Pa. (51).

Moody, Lucius W., 39 Church St., New Haven, Conn. (43). Died January 10, 1903.

Morison, George Shattuck, 49 Wall St., New York, N. Y. (50).
Died July 1, 1903.

Rand, Theodore D., Radnor, Pa. (47). Died April 24, 1903.

Rhoads, Edward, Haverford College, Haverford, Pa. (47). Died July 4, 1903.

Russell, Frank, Chloride, Arizona. (45).

Russell, John Edwards, Leicester, Mass. (47). Died October 28, 1903.

Schwalbe, Carl, 1002 South Olive Street, Los Angeles, Cal. (51).
Died June 14, 1903.

Sebert, Wm. F., 48 Strong Place, Brooklyn, N. Y. (41). Died March 29, 1903.

Thurston, R. H., Cornell University, Ithaca, N. Y. (23). Died October 25, 1903.

Van Brunt, Cornelius, 319 E. 57th St., New York, N. Y. (28).
Died October 1, 1903.

PROCEEDINGS OF THE AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE.

8VO. PAPER. WITH NUMEROUS ILLUSTRATIONS.

Vol.				
	I.—Philadelphia Meeting	1848,	pages 156,	published 1849.
	II.—Cambridge	" 1849,	" 479,	" 1850.
	III.—Charleston	" 1850,	" 239,	" 1850.
	IV.—New Haven	" 1850,	" 449,	" 1851.
	V.—Cincinnati	" 1851,	" 287,	" 1851.
	VI.—Albany	" 1851,	" 480,	" 1852.
	VII.—Cleveland	" 1853,	" 312,	" 1856.
	VIII.—Washington	" 1854,	" 372,	" 1855.
	IX.—Providence	" 1855,	" 357,	" 1856.
	X.—2d Albany	" 1856,	" 547,	" 1857.
	XI.—Montreal	" 1857,	" 449,	" 1858.
	XII.—Baltimore	" 1858,	" 376,	" 1859.
	XIII.—Springfield	" 1859,	" 444,	" 1860.
	XIV.—Newport	" 1860,	" 328,	" 1861.
	XV.—Buffalo	" 1866,	" 174,	" 1867.
	XVI.—Burlington	" 1867,	" 218,	" 1868.
	XVII.—Chicago	" 1868,	" 410,	" 1869.
	XVIII.—Salem	" 1869,	" 352,	" 1870.
	XIX.—Troy	" 1870,	" 427,	" 1871.
	XX.—Indianapolis	" 1871,	" 491,	" 1872.
	XXI.—Dubuque	" 1872,	" 339,	" 1873.
	XXII.—Portland	" 1873,	" 669,	" 1874.
	XXIII.—Hartford	" 1874,	" 378,	" 1874.
	XXIV.—Detroit	" 1875,	" 541,	" 1876.
	XXV.—2d Buffalo	" 1876,	" 424,	" 1877.
	XXVI.—Nashville	" 1877,	" 456,	" 1878.
	XXVII.—St. Louis	" 1878,	" 424,	" 1879.
	XXVIII.—Saratoga	" 1879,	" 636,	" 1880.
	XXIX.—Boston	" 1880,	" 875,	" 1881.
	XXX.—2d Cincinnati	" 1881,	" 504,	" 1882.
	XXXI.—2d Montreal	" 1882,	" 743,	" 1883.
	XXXII.—Minneapolis	" 1883,	" 598,	" 1884.
	XXXIII.—2d Philadelphia	" 1884,	" 831,	" 1885.
	XXXIV.—Ann Arbor	" 1885,	" 662,	" 1886.
	XXXV.—3d Buffalo	" 1886,	" 486,	" 1887.
	XXXVI.—New York	" 1887,	" 466,	" 1888.
	XXXVII.—2d Cleveland	" 1888,	" 536,	" 1889.
	XXXVIII.—Toronto	" 1889,	" 600,	" 1890.
	XXXIX.—2d Indianapolis	" 1890,	" 597,	" 1891.
	XL.—2d Washington	" 1891,	" 585,	" 1892.
	XLI.—Rochester	" 1892,	" 496,	" 1893.
	XLII.—Madison	" 1893,	" 500,	" 1894.
	XLIII.—Brooklyn	" 1894,	" 599,	" 1895.
	XLIV.—2d Springfield	" 1895,	" 534,	" 1896.
	XLV.—4th Buffalo	" 1896,	" 353,	" 1897.
	XLVI.—2d Detroit	" 1897,	" 579,	" 1898.
	XLVII.—2d Boston	" 1898,	" 744,	" 1898.
	XLVIII.—Columbus	" 1899,	" 527,	" 1899.
	XLIX.—2d New York	" 1900,	" 409,	" 1900.
	L.—Denver	" 1901,	" 402,	" 1902.
	LI.—Pittsburg	" 1902,	" 620,	" 1902.
	LII.—3d Washington	" 1903,	" 594,	" 1903.

Price of the Proceedings \$1.50 a Volume, or to Members \$1.00 a Volume for the last Five Years; Earlier Volumes (to members), 50 cents Each.

Orders will be received for any of the above volumes of Proceedings, bound in full cloth, at 50 cents extra per volume; or in half brown morocco, at \$1.00 extra per volume. Uniform Cloth Covers for the Proceedings, by mail, 30 cents each; or 25 cents by express.

Address:

L. O. HOWARD, Permanent Secretary,
Cosmos Club, Washington, D. C.

UNIVERSITY OF ILLINOIS-URBANA



3 0112 111413909